DISSERTATION: DOCTOR OF EDUCATION

THE RELATIONSHIP BETWEEN EDUCATIONAL THEORY, RESEARCH AND PRACTICE.

A TEACHER'S PERSPECTIVE.

SONIA BLANDFORD

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A dissertation presented in fulfilment of the requirements for the degree of Doctor of Education in the School of Education, Faculty of Social Sciences, University of Bristol.

ABSTRACT

Educational theory, educational research and educational practice stand together under the umbrella of education. The differences that exist have created disparate disciplines; the culture and language of educational theory and educational research are distinct and dissimilar to educational practice.

Action research has attempted to emancipate teachers from their own practice as practitioners engaged in their own research using their own language.

Knowledge and understanding of educational theory and research have been prerequisites to practice.

Changes to initial teacher training as determined by Government policy (1984-1994) emphasise the diminishing importance of educational theory and research in this context.

Previous research has examined the relationship between educational theory, research and practice from an academic or research perspective. This study examines the relationship between educational theory, research and practice from a teacher's perspective.

There were no existing models to follow the research tool, a questionnaire was developed in four phases. The attributes of the study population (66 teachers, 11 teacher educators) provided the framework for the analysis of the questionnaire.

The results suggest that from a teacher's perspective there is a relationship between educational theory, research and practice. Teachers' perceptions of educational theory and research were related to initial teacher training and experience in schools. Evidence revealed that differences between the context and content of initial teacher training courses influenced teachers' understanding of educational theory and research. Teachers and teacher educators supported the notion that the ITT curriculum should include educational theory and research.

A key issue emerging from the study was how the relationship between educational theory, research and practice could develop. Teachers need to *know how to know* in order to develop an understanding of educational theory and research and their relationship to practice.

MEMORANDUM

I certify that the work on which this dissertation is based is my own independent work except where acknowledged in the text.

Signature: Sonia Blandford Date: 10.2.1995

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DEDICATION

This dissertation is dedicated to the memory of Jonathan.

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GLOSSARY

ATL	Association of Teachers and Lecturers
CARE	Centre for Action Research in Education
CATE	Council for the Accreditation of Teacher Education
CPS	Centre for Policy Studies
DES	Department of Education and Science
DFE	Department for Education
ERA	Education Reform Act
HEI	Higher Education Institution
HMI	Her Majesty's Inspectorate
ITT	Initial Teacher Training
LEA	Local Education Authority
LMS	Local Management of Schools
NC	National Curriculum
NUT	National Union of Teachers
OFSTED	Office for Standards in Education
PGCE	Post Graduate Certificate in Education
SHA	Secondary Headteachers Association
UEA	University of East Anglia

Prologue

In order to arrive there,

To arrive where you are, to get from where you are not,

You must go by a way wherein there is no ecstasy,

In order to arrive at what you do not know,

You must go by a way which is the way of ignorance,

In order to possess what you do not possess,

You must go by way of dispossession,

In order to arrive at what you are not,

You must go through the way in which you are not,

And that you do not know is the only thing you know,

And what you own is what you do not own,

And where you are is where you are not.

T.S. Eliot East Coker, (Four Quartets)

(As quoted in Arts and the Adolescent 1975, p.70)

INTRODUCTION

The educational climate in England and Wales during the last decade has become increasingly turbulent. The Government has initiated a series of changes which will have everlasting effects on those participating in the educational process. This dissertation intends to focus on an area which encompasses all aspects of education; the relationship between educational theory, educational research and educational practice. In essence, the writer is interested in whether educational theory and research are relevant to pedagogic practice in secondary schools. Education is highly individualistic, seeking to enable individuals to make rational choices for themselves. If education is concerned with developing the individual then educational theory, research and practice should contribute to this process. Collaboration between theorists, researchers and practitioners is therefore critical to the educational process.

As a secondary school teacher engaged in educational research, it is evident to the writer that, with the exception of practitioner research educational theory, research and practice are disparate disciplines. Each area of educational study has produced its own mountain of literature in the cavernous range of academia. If each is to contribute to education there is a need for greater awareness of the tools, mechanisms, practices and culture of each discipline. The current climate of uninhibited change is forcing those engaged in education to reflect on their own practice. Whilst reflecting, would it not be pertinent to look to the future, broaden the horizon and encompass other areas of educational knowledge and experience?

An understanding of how knowledge is gained should be fundamental to the practitioner in the classroom. However, epistemology, ontology and methodology remain rooted in the domain of theorists and researchers, not practitioners. The adoption of scientific practices, including scientific language, restricts the practising teacher's access to educational theory and research. The language of research prevents practitioners from participating in educational research. The discourse of theory is dissimilar to the discourse of practice which is dissimilar to the discourse of research. The writer argues that there is no shared language among the disparate educational disciplines. Action Research, as defined by Stenhouse (1975, 1979a) and his colleagues, attempted to resolve the researcher/practitioner issue by engaging the teacher as a researcher in the research process. The focus of action research was the analysis of practice in order to improve practice. However, as will be shown (Chapter 2) action research has limited application as a science, theories remain untested, predictions and the methodology naive.

Current changes to the Initial Teacher Training (ITT) policy offer this study a practical context in which to place the relationship between educational theory, research and practice. Within the ITT curriculum, educational theory and research have risen like a phoenix from the ashes in the application of principles and concepts from three areas of the social sciences; philosophy, psychology and sociology, and have been burnt in the process. History has shown that each social science has, in practice, its own language which has been accommodated by educational theory, research and practice. However, philosophy, psychology and sociology appeared to offer education a start in the race to gain academic status.

The inclusion of social science courses within the ITT curriculum was a response to the Victorian apprenticeship model for the training of teachers, whereby teachers were deemed to be operationalists who could learn their skill from other operators. It was accepted that the social sciences offered academic rigour to teacher training. Education, taught as a subject on the ITT curriculum, was based on a series of generalisable laws misapplied from the social sciences. In a quest to gain academic status, teacher educators included the study of each social science discipline in the ITT curriculum. References to psychology, sociology and philosophy were often superficial, the relevance of texts to educational practices remained undefined. The writer recognises that educationalists were placed in a difficult situation introducing theories and research in isolation from practice. In sum, social science courses may have been misapplied to education, or they may not have had a relevance to educational practice.

The Government's ITT policy (DES: Circular 9/92 and 35/92(Welsh Office)) has challenged the relationship between theory and practice in education. Academic rigour is to take second place to practical expertise within the context of teacher education. Knowledge and understanding of educational theory and research have been written out of the ITT curriculum as Government policy has directed ITT programmes to focus on practice alone.

This dissertation focuses on the relationship between educational theory, research and practice. Therefore an understanding of relevant terminology is critical to this inquiry. The writer offers a brief examination of the terms as applied to educational practice.

A theory can be generated or applied to almost any situation within the realms of human experience. In essence theory can be divided into three categories; positivist, qualitative and critical. In practice the natural scientist adopts a positivist approach. The positivist tradition defines theory as a principle or hypothesis which has been applied or tested. In contrast the social scientist could adopt elements from the positivist, qualitative and critical paradigms.

Pedhazur and Pedhazur Schmelkin, (1991, p.180) described theory as:

> *... an invention aimed at organising and explaining specific aspects of the environment.*

A broader definition which could be applied to the social science context is defined by Giddens (1974, p.19):

> *A theory is a generalisation or series of generalisations by which we attempt to explain some phenomena in a systematic manner.*

Whether a theory is specific or general, it requires an application to the human experience. Therefore educational theory and research should apply to educational practice.

The application of research methodology to the educational context has been compounded by the range and complexity of research practices. The debate surrounding research and research methodology illustrates the diversity of meaning which exists. There are however, general characteristics of research which have been identified by Wiersma (1991, p.30) :

1) *Research is empirical.*

2) *Research can take a variety of forms.*

3) *Research should be valid.*

4) *Research should be reliable.*

5) *Research should be systematic.*

The diversity of meaning and application compounds the difficulties encountered by teachers when attempting to relate theory and research to practice. If education is concerned with developing the autonomy of the individual through the process of obtaining understanding and applying knowledge, teachers should have an understanding of knowledge. However knowledge of research and theory within the educational arena is restricted by the relationship between research and practice. If teachers do not understand their practice within the context of research, does this diminish their understanding of their practice? Knowledge of the process of education, *to know how to know*, should be central to pedagogic practice. If teachers do not have this knowledge their approach to the task of educating their pupils is determined by practice alone. Is this the way forward? Should formal education be an operational process excluding any theoretical understanding of knowledge? The writer believes that an understanding of educational theory and research is fundamental to an understanding of educational

practice. Whether practitioners agree with this belief will be examined in the analysis of the data gathered from the study questionnaire.

This dissertation will examine educational theory, research and practice within the context of secondary education. The relationship between educational theory, research and practice will require further investigation. This dissertation is an introduction to a difficult issue and is presented in eight chapters.

Chapter 1 will examine the nature of education and educational research from a teacher's perspective. The writer will argue that in order to gain academic recognition, Higher Education Institutions (HEIs) transferred the basic ingredients of research from the natural sciences and social sciences to education. This chapter will discuss methodological and philosophical issues as a means of understanding why this occurred.

Chapter 2 will debate the place of action research as a means of breaching the theory/practice divide. The chapter will focus on the distinctive features of action research which attempt to apply qualitative methodology to the context of educational practice.

Chapter 3 reviews Department of Education and Science (DES) Circulars 9/92 and 35/92 (Welsh Office), which determined the current policy for the initial training of all secondary teachers. Specifically, this chapter will examine the changes in ITT policy since 1984 which impact on the relationship between educational theory, research and practice.

Chapter 4 describes what research was intended by the writer to identify the relationship between educational theory, research and practice as perceived by those engaged in secondary education. There were no models to follow, no existing pathway on which to focus this research. The research question provided the focus, the research attempts to provide the basis for further enquiry.

Chapter 5 examines the process of developing the research questionnaire. In reviewing the methodology the writer intends to provide recommendations for further research.

Chapter 6 describes the analysis of responses to the research questionnaire. Tables illustrate the relationship between results and the attributes of the study population.

Chapter 7 provides an analysis of the research as applied to key issues arising from the literature search (Chapters 1, 2 and 3).

Chapter 8 discusses the content of the dissertation. The writer will also debate the application of phenomenological methodology to educational theory, research and practice. Final conclusions are then presented.

CHAPTER ONE

TEACHERS' PERSPECTIVE OF EDUCATION AND EDUCATIONAL RESEARCH ISSUES

INTRODUCTION

In this chapter, literature relating to education and educational research will be reviewed in order to gain an understanding of educational research and practice. The chapter is divided into two sections: part one focuses on education, part two focuses on educational research.

Why educational research and educational practice exist as disparate disciplines remains unclear. The writer believes that although practitioners participate in the educational process the degree of commonlity between theory, research and practice is limited to and by the vocabulary employed. The language of teaching is not the language of theory and research. The main obstacle to collaboration would appear to be the language of educational research. Having been borrowed from the natural and social sciences the language of research is not the language of teachers.

As the poor relation in terms of academic status teachers have been reluctant participants in educational research. This does not mean that teachers would not be motivated to participate in educational research. Significantly, the socio-political and cultural framework of pedagogy differs from that of research. The writer argues that the knowledge and skills required for teaching differ from those required for research. The

position of the teacher in the educational arena has contributed to the emergence of disparate cultures with incompatible languages. Traditionally, knowledge has provided individuals with the professional status to teach or inform others. The teacher teaches the pupil, the teacher educator teaches the teacher, and educational theorists and researchers provide the theoretical framework for the study of education. The knowledge generated by the disciplines of theory, research and practice have enabled each to influence each other. However, each discipline has a different methodology operating within its own paradigm. The writer recognises that the methods and procedures employed by members of each branch of the education profession are based on a body of theoretical knowledge and research (Carr and Kemmis, 1986). In practice this sets theory, research and pedagogy in an hierarchical order with teaching at the lower end of the scale.

TEACHERS' PERSPECTIVE OF EDUCATION

The process of educating individuals is broader than the specific areas of educational theory, research and practice. All humans are educated, socially, politically and culturally. In all but a few cases humans co-exist with other humans and are educated to do so. The position of an individual in society is determined by the nature and quality of the educational process. As (s)he grows up, emerging from childhood into adulthood, the social and political status of the individual is dependent on the educational process. For each task, from eating and sleeping to reading and writing, whether instinctive or learnt, the knowledge and experience gained through the process of education is critical. Humans are educated, consciously and subconsciously from birth. Education, in essence, is concerned with the development of individual autonomy.

Formal education, instruction and learning take place in formal settings; schools, colleges and universities. In practice the framework for formal education is legislated for by Government. The examination of current initiatives in education led the writer to conclude that education is a process not a product. It is people based focusing on the individual and ought not to be a commodity. It should be judged on effectiveness not efficiency.

The position of the teacher and educational researcher within this framework is unclear. The teacher and researcher as educationalists may have an understanding of education but the nature of their understanding will differ according to their knowledge and understanding of educational issues.

By defining education as *the development of individual autonomy*, rationality, power, participation and democracy emerge as key issues. Each issue is discussed within the context of this study.

Rationality is central to individual autonomy (Graham, 1986, pp.39-40). Within the educational process individuals are engaged in decision making; people evolve as self-ruling rational agents. Rational planning is therefore critical to the development of the individual. Elster (1986, p.1) considered rational choice theory from an individual perspective,

> *The theory of rational choice ... tells us what we ought to do in order to achieve our aims as well as possible.*

In order to set aims priori-knowledge of the meaning and context of each aim is required. Although there is not a simple definition of what the process should be, rational choice can only exist within the realms of knowledge and experience.

Teachers work within a social group that determines its own ideology within the culture of schools. The school is the workplace of the teaching community. Starratt (1991, pp.198-200) stated that *schools should be caring, critical and built on justice.* Schooling is structured to reflect the rules and regulations of society. As a sub-culture of society schools emulate society, yet each school creates its own ethos. Teachers will differ from school to school. The knowledge and experience of teachers will determine their participation in the educational process. Similarly the knowledge and experience of researchers will determine their participation in education. Therefore the knowledge and experience of a teacher within the culture of schools will differ to the knowledge and experience of researchers within the culture of research. An understanding of each culture is a prerequisite to understanding education and the educational process.

The framework for rational choice requires knowledge and experience of our own situation, be it teacher and/or researcher. Knowledge of education can not replace experience. Experience of education can not replace knowledge. Understanding of education is the key. The difficulties remain, who determines the parameters for education? who controls? who legitimates? and ultimately, who defines? The distribution of power among educationalists is pivotal to the relationship between each discipline within the education arena.

Graham (1986, pp.63-4) considered the notion of equality of power as *glib.* Key decisions are conditioned by the systems and structures in which individuals are engaged. Educational institutions are full of individuals being educated collectively. Those in authority, either by virtue of knowledge or virtue of position, are inevitably in power. Power is exercised by authority. Autonomy applied to this context is a characteristic of both thought and action. As an example teachers may be in power over their pupils. In the classroom teachers are empowered to direct pupils through the national curriculum(NC). The NC is determined by the Government which has the legislative power to dictate the content of each pupil's school curriculum. The relationship between educational researchers and teachers is more difficult to define within the context of power. Educational researchers observing, analysing and reflecting on educational practice may have an influence on practice. This is dependent on the relationship between theory, research and practice. Ultimately the distribution of power within this context is dependent on educationalists understanding of theory, research and practice.

How can educationalists be empowered? Lukes's (1974) account of different conceptions of power focused on power <u>over</u> (as in a relationship) in contrast to power <u>to</u> (as in capacity or ability). Knowledge is central to power <u>to</u>. As Giddens (1974, p.54) explained:

> *.. all human action is carried on by knowledgeable agents who construct the social world and are conditioned or constrained by the very world of their creation.*

If knowledge determines power, both the teacher and researcher have power. Socially, politically and culturally the teacher has knowledge and experience of schools, where the researcher is effectively without power. However, when research in schools is completed the researcher returns to a domain where (s)he is empowered. By implication the researcher is in power over the teacher, although with knowledge both have power to. Within a broader context society consists of individuals who have the opportunity to exercise control while gaining independence (Simone Weil quoted by Chamberlain (1989, p.132)). In *constructing the social world* both teachers and researchers are *conditioned or constrained by the very world of their creation.* While teachers and researchers co-exist within the world of education, the nature of their participation within that world is as relevant to their position as power.

Bottery (1992, p.163) considered participation to be both *the right and duty of teachers.* However the social conditions in which the individual exists will set the parameters for the level of participation. The teacher, the researcher and the theorist may participate in the education of others, the degree of their participation will be determined by the conditions in which they work. Specifically participation is concerned with enabling the individual to exercise choice, thus retaining autonomy within a collective framework. As Chamberlain (1989, p.4) commented:

> *The free Athenian was not a man left alone to do his own thing, but one who was allowed (and was expected) to participate in civil life.*

Participation may not be all that it first seems. Secondary school teachers may participate in research, yet have no control or understanding of either the process or

product of the research. Equally, researchers may participate in the development of educational theory yet have no participation in where or how the theory is applied. As either teacher or researcher the level of participation is controlled by those with the power to determine the outcome. Within the context of their relationship with each other, the participation of researchers and teachers in the educational domain remains unclear.

Bottery (1992, p.51) and Graham (1986, p.155) both quoted Pateman (1970) who constructed a case in favour of participation. However Pateman employed the term in confined ways: pseudo participation , partial participation and full participation. Pseudo and partial participation may apply to educationalists; the theory, research and practice of education, as disparate disciplines, do not relate to full participation. The notion of participation may appear to be central to the educational process yet it remains the antithesis of educational practice. As Schein (1992, p.135) stated:

> *..in the final analysis, the degree to which organisational policies are handled participatively depends largely on the economic and political system within which the organisation exists and how its basic mission is defined.*

If the relationship between educational theory, research and practice is encouraged by the political system, full participation in education may occur. At present only pseudo- or partial-participation exists, resulting in a limited understanding of education. Graham (1986, p.166) concluded:

> *The impulse behind participation theory fits fairly well with the theory (which) focuses on the individual in the context of co-operative effort with others, and engages in an attempt to find concrete means of fulfilling the ideal of self-rule which is at the heart of the concept of democracy.*

Democracy exists as a method which could be applied in the context of education in order to enhance the relationship between theory, research and practice. Education develops individual autonomy. However, as Wolffe (1973, p.42) stated:

> *Children are taught to accept majority decisions before they have learnt to count.*

The same could be said of educational practitioners. If as Graham (1986, p.18) stated, democracy is a method, it is one which has been ignored at every level of education. The writer believes that the isolation of theory from practice has led educationalists to create disparate disciplines. Democracy, by definition, could have a strong hold over the individual, it could also provide a pathway for collective agreement. Education researchers could therefore approach their studies within a framework which is both democratic and autonomous. The sense of responsibility of the individual to the collective would then provide a democratic basis for educational theory, research and practice.

How can theory become reality? Teacher participation in research is in its infancy, secondary school teachers who engage in research are rare. The commensurability of-

research and practice is therefore in question. The writer believes that the practices of research and pedagogy should *borrow* from the philosophical debate on democracy. Given that a method exists for democracy, a methodology should be generated which examines education and encompasses both research and practice. Educational researchers have a moral responsibility to participate democratically with teachers in the study of education. Similarly teachers, as practitioners, have a responsibility to educational research. The problem exists both in theory and practice, as educational research has not determined a methodological framework to examine education which engages teachers. The paradigm of educational research is a paradigm *borrowed* from the social and natural sciences. If the theoretical framework exists for educational research, a methodology for education which accommodates theory, research and practice could emerge. As stated in the prologue to this study,

> *in order to arrive at what you do not know, you must go by a way which is the way of ignorance.*

If the relationship between educational theory, research and practice is to progress a methodology which encompasses each discipline is required. The approach to educational methodology should encompass rationality, power, participation and democracy in order to enable collaboration between theorists, researchers and practitioners. The practitioner researcher has emerged from the critical tradition in an attempt to resolve this issue. Practitioner research has been considered by theorists as the way forward in bridging the gap between educational research and practice. This is debated in the following chapter (Chapter 2).

TEACHERS' PERSPECTIVE OF EDUCATIONAL RESEARCH ISSUES

Part one of this chapter has discussed education which, in essence, is concerned with the development of individual autonomy. Yet the study of education is dependent on methodology generated from the study of the natural sciences and, more recently, the social sciences. Academic institutions, flying the flag of *academic rigour*, seemed determined to transfer the basic ingredients of scientific research to educational research. Prerequisites to teachers participating in educational research are knowledge and understanding of the culture and methodology of research.

A scientist in a laboratory surrounded by chemicals in test tubes and working through a list of applied formulae is engaged in research. A scientist in a classroom observing children's behaviour with no predetermined hypothesis is also engaged in research. The former is a natural scientist, the latter a social scientist or, more specifically, an educational researcher. However the culture of the natural scientist compared to that of the social scientist is as different as the methodology employed. The understanding of the process of research, its function, purpose and relevance is therefore dependent on different kinds of understanding. The socialisation of a natural scientist is different to that of a social scientist.

Sandford (1987, pp.67-104) found that *human beings are engaged in the research process as a means of rationalising events, i.e. producing facts.* Where there is certainty in the world the certainty requires rational thought which may also be applied to uncertain processes. Research is therefore a means of systematic inquiry whether at a common sense level or in the application (replication) of causal laws. According to Sandford, the human mind looks for means of categorising and then confirming

hypotheses. Some people will want to look at more complex logical responses as alternative solutions to a single illogical response. The laws of logic may appear more accessible to the scientist whose aim is to predict events. An illogical response would not enable the researcher to provide facts for further analysis, lack of logic would move research into a new domain. This domain may have a closer relationship to educational practice where logic may not always apply.

The practice of research requires consultation which engages the values and beliefs of others. Each researcher will have their own values and beliefs determined by their own background and culture.

The identification of the cultural influence is critical to the research process. As with all research, the key is knowing what we see as opposed to seeing what we know. There is little differentiation between the social sciences and natural sciences in this matter. The research process is a human endeavour, whether created by the mind or discovered by nature. Education is also a human endeavour.

The foundation of educational research is science, educational research methodology is firmly rooted in scientific practice. Scientific methodology is concerned with the application of logic. More specifically, the inductivist's approach to scientific methodology focuses on the principle of universal causality. Put simply, every event has a knowable cause; Anderson et. al., (1988, p.232) stated:

The task of scientific theory is to identify the causal conditions and to generalise them into causal laws. This identification is achieved by what are called the 'method of agreement' and the 'method of difference'.

Therefore looking for agreements or differences in any set of events which could then be applied to a similar set of events is inevitably causal and objective. Significantly, the inductivist engaged in scientific practice would have to be in a position to recreate experimental conditions which would equate to the time, people and context present when the theory was originally created. This would not allow any degree of interpretation or subjectivity. Consequently the logic of science presupposes that all scientific theory obtained by inductivist methods would be reliable, valid and (by the way of verisimilitude) generalisable. In sum, all established scientific theory would be deemed the truth, as determined by inductivism. Whilst this may appear logical, the introduction of the epistemological argument places serious objections to the premise on which this logic is based. The foundation of scientific knowledge is based on the belief that some scientific generalisations tested under experimental conditions can apply to all such events.

Hume, in the 18th century, questioned whether laws established by inductivism could be deductively valid. More recently Popper, in the Logic of Scientific Discoveries (1972, p.317), stated that the truth of scientific hypotheses and generalisation could not be justified by inductivism. Popper distinguished pseudo-science or metaphysics from actual science according to the methodology employed, and concluded that inductivism is a pseudo-science. Popper's philosophy of science was based on the premise that science does not seek confirmation (agreement or difference) of its predictions but

falsifications (Anderson et. al., 1988, p.237). The methodology employed by Popper restricted the range of propositions in order to give a logically simple way of determining their status. Popper believed that scientific theories should state in principle the grounds on which they could be refuted. Popper also concluded that the longer the theory survives the greater its verisimilitude, *its approximation to a description of how things are* (Anderson et. al., 1988, p.239).

Social scientists and natural scientists have debated the prescriptive nature of Popper's laws, however the question of scientific validity remains unresolved. Popper considered science in methodological terms, and methodology is a central issue in the evolutionary programme of the social sciences. If, as Popper implied, the natural sciences are based on questionable laws, the foundation of educational research is, at best, weak. The application of natural science methodology to the social sciences requires further analysis. Anderson and colleagues (1988, p.264) concluded:

> *Certainly there is no need to try to emulate any 'natural science model' of theory and investigation, for, it seems, no such unified model exists.*

Inevitably, by borrowing scientific methodology educational research has inherited both good and bad practices. The question remains has scientific methodology provided a model for education?

CONCLUSION

This chapter has shown that education and educational research are everyday activities. Human beings engage in these processes to rationalise and justify their thoughts and

actions. Whether or not research is scientific is dependent on the methodology employed. In the pursuit of academic rigour educational researchers have adopted the methodology of the natural sciences. The application of scientific methodology to the educational context is problematic. However, at an epistemological level, there is no apparent reason as to why educational research should not be considered a science. In essence, educational research is a field of enquiry which predicts and examines knowledge. Educational research is also concerned with the intellectual processes of the journey of discovery. It is the methodological issues which remain unresolved.

The language and laws of the natural sciences when applied to the social sciences, have provided academic status for the social scientist. As a consequence the methodology employed by educational researchers has distanced them from the population they are studying. This places the educational researcher in a dilemma; how to be acknowledged by both academic and teaching communities. To develop a greater understanding of their subjects, educational researchers should engage teachers as co-researchers with a shared understanding of education and the educational research process. Otherwise the gulf between educational research and practice will widen .

Practitioners need to *know how to know.* If teachers, as practitioners do not have an understanding of the origins of research and its methodology they will not be able to participate in research of their own practice. Whilst educational theory, research and practice exist as disparate disciplines an understanding of educational practice will be limited. The following chapter examines the emergence of action research which attempts to bridge the theory/practice divide.

CHAPTER TWO

ACTION RESEARCH - AN ACT OF FAITH?

INTRODUCTION

The emergence of educational research from the natural and social sciences as described in the previous chapter created the disparate cultures of educational research and practice. As researchers apply scientific methodology to the educational context the language of the academic remains in a domain far removed from the classroom. Anning (1986, p.57), quoted by Webb (1990), stated:

> *We seemed to live in separate worlds. A prestigious research industry seemed to be thriving at the expense of school practitioners rather than in support of them.*

The writer has argued that the application of scientific terms, practices and methodology to education has divided theory from practice. This was not the first occasion within the social sciences that practitioners had criticised researchers for their scientific approach to the social context. A methodology which has attempted to resolve many of the issues raised in Chapter 1 is practitioner research. Practitioner research is the premise on which action research is based. The writer considers action research to be an act of faith and proposes that phenomenology would provide an academic framework for the study of education. This chapter debates the position of action research in both the academic and practical arenas of education. The chapter begins with a description of practitioner research. It then focuses more specifically on action research and concludes with an

introduction to phenomenology.

PRACTITIONER RESEARCH

Giroux (1983, p.2), at the start of his introduction to Theory and Resistance in Education quoted Marcuse (1960):

> *Since the established universe of discourse is that of an unfree world dialectical thought is necessarily destructive, and whatever liberation it may bring is liberation in thought and in theory. However, the divorce of thought from action, of theory from practice, is itself part of an unfree world. No thought and no theory can undo it; but theory may help to prepare the ground for their possible reunion, and the ability of thought to develop a logic and language of contradiction is a prerequisite for this task.*

Thus, the educator engaged in practice operates also as a critical thinker.

Socio-political, ideological and cultural issues remain central to this debate. As an example, Giroux (1983, p.40-1) found that theorists from the Frankfurt school lacked an awareness of cultural differences in the application of their work to American schools. He believed that critical theory should be reformulated to take account of the historical conditions in which it is applied, as research is not grounded without an understanding of what exists in practice. The analysis of practice has a variety of meanings; an educational researcher's perception of a classroom incident would differ from that of the teacher responsible for the class in question. Would the teacher's analysis of the incident

constitute research? Can teachers provide a framework for research within their own socio-political domain?

Educational theorists (Stenhouse (1975) and Carr and Kemmis (1986)) have established academic careers based on the belief that teachers, as critical thinkers, emerge as researchers. However while the diversity and complexity of critical theory may prepare the ground for the union of theory and practice, it has also served to compound the difficulties experienced by teachers when approaching educational research.

Carr and Kemmis (1986, pp.10-18) described eight educational research traditions:

Philosophical Studies - study of knowledge, ethics and political life;

Grand Theorising;

Foundation Approach - education fragmented into philosophy, psychology and sociology;

Educational Theory - a range of principles;

Applied Science and Technical Perspective - the curriculum as a delivery system;

Practical - curriculum developed in the field;

Teachers as Researchers - an individualistic approach, school-based curriculum development;

Critical Tradition - created a climate in which the intellectual framework for the curriculum could be developed.

The emerging critical tradition was consultative and participatory, in contrast to previous practices. The critical tradition questioned the extent to which the methods of the natural sciences were applicable to social life. Critical theory focused on the generation of knowledge which could relate to the purpose it served. If, as intended, the critical tradition was adopted by teachers to enhance their practice, the divide between theory and practice would apparently no longer exist. The following section explores the foundations of action research embodied in the critical tradition and applied by teachers to their own practice. Central to this issue is the nature of educational research.

AN INTRODUCTION TO ACTION RESEARCH

Action research is rooted in the traditions of ethnography; a qualitative approach to the social sciences which relied heavily on anthropology for its methodology. Whilst qualitative research is multi-faceted it has several characteristics which remain consistent in practice. These have been identified by Bogdan and Bilken (1982, pp 27-30), and Burgess (1985a), and are summarised as follows:

1) *The researcher is the key instrument, although mechanical means can be adopted (Becker, 1986; Ogbu, 1974).*
2) *Qualitative research emphasises description.*
3) *Qualitative researchers are concerned with process rather than simply outcomes or products (Rist, 1984).*
4) *Qualitative researchers tend to analyse their data inductively (Glaser and Strauss, 1967).*
5) *"Meaning", is of essential concern to the qualitative approach.*

More specifically the anthropological approach to social sciences involved *getting into the skin of others* - a means of allowing the researcher to experience like experiences to the subject of the research. This would allow the researcher to prepare their work from the *inside*. An example of this practice can be found in the work of Bronislaw Malinowski (1922). As a displaced person in the First World War, Malinowski lived in a native village in the Trobriand Islands. Malinowski learned the language and culture of his subjects thus becoming an inductive researcher. As a pioneer of fieldwork Malinowski set the parameters for subsequent anthropological and qualitative research. In adopting a scientific perspective Malinowski believed that the researcher should begin with *foreshadowed problems*. Thus the application of theory to practice in a social context could be measured through description.

Qualitative research methods continued to gain academic recognition with the work of the Chicago school (1920). This American initiative was based on the natural scientific approach to the social sciences as adopted by British sociologists. The ethnomethodological methods developed in Chicago added the *symbolic interactionist* (Blumer, 1966) perspective to qualitative research. This enabled the researcher to describe their own role within the research context prior to analysis.

A further development in qualitative research occurred in the 1960s; phenomenology. This approach combined description with statistical analysis and originated from the work of the phenomenological philosophers. Although the need for description in qualitative research was self-evident, the phenomenologist required factual direction not anecdotes. Phenomenology will be examined in more detail in the final section of this chapter.

In practice the methods adopted by qualitative researchers were those first devised by the anthropologists in the 19th century; participant-observation and in-depth interviewing. The results were still detached from the reality of the player in the field, the changes to qualitative research which occurred during the 1960s and 1970s reflected the question of scientific validity rather than the realism of the analysis.

Action research is subject (people) based. It is the participation of the subjects which is the identifiable focus of action research. The psychologist, Lewin (1946, p.208), developed the model upon which action research was to be based:

PLANNING, EXECUTION and RECONNAISSANCE.

This model was continuous and would lead to a plan of action that evoked change. However, the application of Lewin's model to educational practice was heavily criticised by Hodgkinson. He found that Lewin's work was not sufficiently self-critical. Hodgkinson (1957, p.141) commented,

> *Teachers and administrators lacked knowledge of research, research is a professional activity, teachers would have difficulty.*

Hodgkinson's key concern was that as action research was based on change, who would determine or implement the change? This is as relevant today as it was in America in the 1950s. By evoking change action research would have an impact on both the researcher as a subject and on the players in the field. In contrast, Halsey (1972, p.168) believed that this was a positive aspect of action research. The change process adopted by Halsey

(1972, p.166-7) incorporated;

1) *social planning,*

2) *research to induce change,*

3) *the political,*

4) *diversionary tactics,*

5) *a combination of the previous four elements.*

Thus Halsey believed that the multifaceted aspects of qualitative research could be practised successfully within the educational context.

The adoption of qualitative methodology by educationalists provided an alternative solution to the problem of the transfer of scientific methodology to education. Stenhouse examined this issue. He and his colleagues at the University of East Anglia (UEA) Centre for Action Research in Education (CARE) developed research practices for teachers within the paradigm of qualitative research. Stenhouse quoted in Rudduck and Hopkins (1985, p.13) stated:

> *In short, it seems that while social science applied to education can produce results which help us to understand the ground rules of action, it cannot provide the basis for a technology of teaching which offers reliable guidance to the teacher.... it is the teacher's task to differentiate treatments .... it is in part the recognition of this problem that accounts for the spread of interest in naturalistic or ethnographic styles of educational research.*

More specifically, Stenhouse believed that the psycho-statistical paradigm generated from Fisher's work in agriculture could be applied to education. This was based on the transfer of findings from one field (literally) of research to another through the random selection of subjects to allow for statistical analysis. However, Stenhouse, as quoted in Rudduck and Hopkins (1985, p.21), found that the transfer of the Fisherian model to the educational context raised several issues;

(i) random sampling - not possible,

(ii) reliability - not testable,

(iii) validity - not testable,

(iv) criterion referencing - not possible,

(v) contextual variables - not consistent.

Thus the transfer of methodology from the psycho-statistical paradigm to education was as difficult in practice as the transfer of scientific methodology.

The development of action research reflected Stenhouse's interest in curriculum development. Action research engages the teacher as a researcher in the research process through the analysis of practice in order to improve practice. Self-monitoring by the teacher as a researcher is carried out in the classroom. As a reflective practitioner the teacher is, according to Stenhouse and his colleagues, able to generate theories emanating from their own practice.

Stenhouse provided a model which would enable teachers to research their own practice. The model starts from a focus and moves through a spiral which encompasses change and evaluation. However, whilst the study of educational research methodology may be in its youth, the study of action research is in its infancy. As a science it has limited application, theories remain untested, predictions and the methodology naive. The research issues, which are as yet unresolved, relate directly to the academic rigour of scientific practice. Action research is dependent on anecdotes which lack validity and reliability. The results of action research are contextually based, non-generalisable and inconsistent. At best action research can inform practice through predictions which provide guidance to practitioners.

It remains that the majority of educational researchers are non-practitioners. If the teacher was to become the researcher, then many of the above issues may be resolved as the focus of the research would be determined by practice not theory. In addition, the researcher would be sensitive to the environment including political and ethical issues, the cost of research would be limited as the teacher would be employed in their own practice, and time would be dependent on the predetermined period of study rather than access to the field. However, the writer considers that within the academic arena teachers are not educational researchers. They are not trained, they do not have access to the tools of research. Teachers do not have an understanding of the scientific laws which are the foundation of educational research. Even if teachers were trained, several problems would remain, the teacher researcher would be attempting to fulfil two roles which, through the process of socialisation, are inherently different.

Elliot (1981) paid considerable attention to the participation of teachers in action research. He considered that involvement should be voluntary, enabling teachers to retain control, and believed that principles of impartiality, confidentiality, negotiation, collaboration and accountability should be respected. As a student of Stenhouse, Elliot based his theoretical premise for action research on Stenhouse's epistemology and pedagogy. Elliot (1985, p.242) concluded;

> *there is no distinction to be drawn between the practice being researched and the process of researching it.*

The language of teaching would become the language of research apparently resolving many of the issues raised earlier in this study.

Action research was further developed by Vulliamy (1984) and Webb (1988). In general, Vulliamy and Webb (1991, p.272) found that the effects of action research on the individual and the school were positive. Vulliamy et. al. (1990, p.1) had previously indicated that qualitative and quantitative methodologies could be combined to produce the explicit terminology necessary to communicate research findings. Therefore action research could in principle combine with methodologies from the positivist paradigm.

Action research is an emergent methodology which could eventually resolve the problems relating to the theory/practice divide currently existing in education. However before this becomes a possibility there are several critical issues which need to be addressed as identified by Carr and Kemmis (1986, p.9):

1) *The attitudes and practices of teachers must become more firmly grounded in educational theory and research.*

2) *The professional autonomy of teachers must be extended ... regarded as a collective, as well as an individual matter.*

3) *The professional responsibilities of the teacher must be extended so as to include a professional obligation to interested parties in the community at large.*

Whilst action research may breach the theory/practice divide on a pragmatic level, the move from the traditional research paradigm to the classroom will require changes which will affect both theory and practice in education. If the teacher is to research their practice knowledge and understanding of educational research will be fundamental. Teachers will need to *know how to know*. Within this context Carr and Kemmis (1986, pp. 180-1) defined action research as *simply a form of self-reflective enquiry*.

Schön (1987, pp.4-5) developed the concept of the reflective practitioner. He extended earlier research by Eisner (1981, 1985) which had combined the artistic with the educational. Eisner (1985, p.179) described the dialogue between the teacher and the researcher as;

connoisseurship - the art of appreciation, an awareness, the basis for judgement.

Schön compared the process of the reflective practitioner with that of an artist differing from earlier action researchers who had concentrated on change and focusing his attention on the individual. He considered that the practices of teachers in the secondary school classroom did not allow them to become reflective practitioners. Schön had determined reflective practitioners to be those who could recognise and differentiate between *reflection-in-action* and *reflection-on-action* as two component parts of *knowing-in-action.* He believed the work of an instrumentalist participating in master classes to be that of a reflective practitioner and considered reflective practice to be the core of artistry.

Reflection requires an understanding of an individual consciousness and how this interacts with the world. Curtis (1978, p.xiii) commented;

> *Conscious perception involves consciousness of the presence outside consciousness of the things we see or the sounds we hear. We can distinguish as aspects or component parts of conscious perception both an awareness of an external world of coloured, audible, tangible, things and an awareness of one's consciousness illuminating the world for oneself.*

From this we can conclude that the 'simple-minded empiricism of action-research is unacceptable. The researcher must look beyond the immediate and structure what (s)he perceives within the context of previous knowledge. This process is described as phenomenology.

Understanding research is fundamental to the research process; teachers who do not have the required knowledge and experience will not have an understanding of research. The flaw in action research methodology is the principle of the way you teach is the way you see. Although perception is not the same as teaching, one may influence the other. At a fundamental level a research methodology which extends beyond action research is required for the development of educational research.

AN ALTERNATIVE SOLUTION: PHENOMENOLOGY

The writer has proposed that education, as a *borrower* from science, could fail to identify its own theoretical and research needs. Although action research has attempted to resolve many of the issues raised in this debate, it has lacked academic rigour by ignoring critical analysis of its own practice. While such failures exist the breach between theory and practice remains. Alternatively, the writer suggests that phenomenology could provide the foundation for the development of a methodology for education that encompasses both research and practice. The distinguishing features of this philosophical viewpoint are described by Curtis (1978, p.ix);

1. *a belief in the importance, and in a sense of the primacy, of subjective consciousness,*
2. *an understanding of consciousness as active, as meaning bestowing,*
3. *a claim that there are certain essential structures to consciousness of which we can gain direct knowledge by a certain kind of reflection.*

Phenomenology is a rigorous attempt to justify in an objective way. This differs from action research in that it is not concerned with the acceptance of ideas based on what is seen. Phenomenology requires the researcher to relate what is seen to previous observations. Phenomenology examines what is out there through an understanding of perception. Phenomenology is based on observation of life, in this it is related directly to education as life is concerned with the process of education. Phenomenology relates to reality, supported by knowledge. To engage teachers in phenomenological research knowledge and understanding of the process would be required. In action research teachers may provide a cast of minds reflecting on their practice; however the language of teachers does not satisfy research at an academic level. In contrast, phenomenology as an established methodology has gained acceptance within the academic arena.

Phenomenology is a principle which as Pojman (1978, p.4) explained;

> *recognises that there are objective structures in reality which, if certain results are to obtain, must be adhered to..*

The relationship between educational research and theory may follow a similar pattern. Identification of the objective structures on which educational practice is based could lead to a greater understanding of education. In order to access phenomenology an understanding of the language would (according to Merleau-Ponty (1962)) *accomplish thinking*. Bolton (1978, p.34) suggested:

> *it is through language in all its forms that we express our pre-reflective contact with the world.*

If phenomenology was applied to educational research and practice, researchers and teachers would require an understanding of their own perception of the world. Development of this potential would entail contact with phenomenologists. Phenomenology could offer education a framework to develop the relationship between research and practice. If teachers endeavoured to understand the nature of the world in which they work (Heaton, 1978, p.126), the resulting knowledge and experience of practice would generate its own phenomenology which could in turn provide a framework for educational research.

CONCLUSION

In order to understand what is happening to educational practice, knowledge of *how to know* is required. Whether teachers would want to develop the knowledge and experience to participate in educational research are key questions contained in the next phase of this study. How do teachers perceive research? What is their understanding of research? Do they wish to know more? Is there a relationship between educational theory, research and practice? The writer considers that such a relationship could exist, *indeed it should,* the problem is *how.* Phenomenology may provide the answer.

CHAPTER THREE

INITIAL TEACHER TRAINING

GOVERNMENT POLICY 1984-1994

INTRODUCTION

Within higher education there has been a shift over time in ITT. The social sciences, educational theory and research have been included in the ITT curriculum according to socio-political influences. As the ITT curriculum has changed there has been a subsequent shift in the role of educational knowledge. Whether teachers have had an understanding of educational theory and research has been determined, in part, by the content of the ITT curriculum. The place of ITT within education is therefore relevant to this study; without knowledge and understanding of theory and research practitioners are unable to participate in the generation of theory and research. An historical overview of ITT since 1984 will set this study within the context of practice. The content and structure of ITT courses are key factors in determining teachers' knowledge of education, theory, research and practice.

CHANGES TO ITT POLICY SINCE 1984

In 1984 the Council for the Accreditation of Teacher Education (CATE) was established by the Government. CATE employed both practising teacher educators and laymen from business which, as a Thatcherite initiative, followed the emerging pattern of combining educationalists with those directly employed in the market place. The belief in some inherent virtue in market forces has been the central theme of Government initiatives since the Conservatives returned to power in 1979. The DES looked to CATE to

validate teacher education courses according to the Government criteria for ITT contained in Circular 3/84, Initial Teacher Training Approval of Courses. The process of validating courses was to have a dramatic effect on future teacher education policies. It also changed the role of the inspectorate and advisory bodies in relation to teacher training institutes.

To elaborate, prior to CATE, each college and polytechnic department of education had an inspector assigned to it. The relationship between the inspectorate and departments of education was known by all participant players. The introduction of a structured unknown body of inspectors would change the nature of the relationship and would have an effect on the evaluation process. A series of Catenotes (1-4) were produced which reiterated the expectations of the Secretary of State with regard to school/HEI relationships. Several university education departments (Sussex, Oxford and Leicester) had previously devised ITT tutorial programmes which focused on a partnership between their institution and schools. In addition, several education bodies worked both individually and collaboratively to generate a policy for school-based ITT programmes. Circular 3/84 (DES, 1984) directed teacher training courses towards closer links with schools. Post Graduate Certificate in Education (PGCE) courses were altered accordingly. The common aim was to extend the school-based component of PGCE courses. Studies of the Oxford and Leicester PGCE programmes found that collaboration with experienced teachers was well received (Everton and White, 1992, p.148). Notably students, teachers and university tutors were committed to the effectiveness of these courses. In addition the DES commissioned its own study of four school-based courses (Furlong et. al., 1988). This revealed the diversity between ITT courses in terms of structure, school responsibilities and governing principles, all areas

which required further analysis prior to implementation of the Government's policy.

The Government pursued its move towards the apprenticeship model for ITT, thus increasing the guidance given by practising teachers to students training to become teachers. The input of teacher educators based at HEIs would, as a consequence, be reduced. This model had originated in Victorian schools and was deemed unsuitable for the professional teachers of this period (1860s). The opposition of teachers to this model led to the creation of the National Union of Teachers (NUT) (Barber, 1992). However, past experience did not influence the Government; teaching was described by the DES (1985a and 1985b) as a practical and technical activity which had to be learned in the classroom. Knowledge of educational theory and research was not required by teachers. The Government stressed the need for students to be guided by good teachers, although the demand for greater involvement of practising teachers to teacher education would, as Tickle (1987, p.28) indicated,

> *reinforce those practices in schools which HMI so eagerly criticised.*

Circular 24/89 (DES, 1989) extended the Government's criteria requiring experienced teachers to be involved in the planning of initial teacher training courses, and in their evaluation. In theory, various Government reports had prepared educationalists for the change in ITT policy. However, the involvement of practising teachers in policy changes to teacher education ran parallel to the implementation of the National Curriculum (NC) and Local Management of Schools (LMS), products of the 1988 Education Reform Act (ERA). Schools were victims of fast and furious policies which would lead to a loss of *trust, commitment, co-operation and common purpose* (Bowe and Ball, 1992, p.5). The

qualities required for the training of teachers in a positive environment by good, experienced professionals were in short supply. In practice school teachers did not have the time or space for manoeuvre (Wallace, 1990).

Her Majesty's Inspectorate (HMI) report, School-based Initial Teacher Training in England and Wales (1991) stated clearly that teacher training should be predominantly school-based. The report commended the positive relationship which existed between schools and teacher training institutions, particularly as schools were not paid for any assistance given to training courses. The report concluded that there was a desire to participate on the part of schools and suggested that a possible way forward would be a contract whereby money would be exchanged in payment for student placements. Market forces influencing education were turning teacher education into a commodity, to be bought and sold with a competitive focus. The element of intellectual enquiry within ITT courses was consequently reduced.

After 100 years of professional teacher educators training teachers as professionals, the Victorian apprenticeship model was to return. Following the Secretary of State's speech, 4th January 1992, a consultation document was published by the DES; 28th January 1992. The main feature of this document was its emphasis on school-based training; 80% of secondary PGCE courses would be school-based. Responses to the document were to be presented by 31st March 1992.

Circulars 9/92 and 35/92 (Welsh Office) were published 25th June 1992. The circulars took account of the responses to the consultation document and the advice of CATE.

They follow three main principles:

i. Schools should play a much larger part in ITT as full partners of HEIs.

ii. The accreditation criteria for ITT courses should require HEIs, schools and students to focus on the competencies of teaching.

iii. Institutions, rather than individual courses, should be accredited for ITT.

Thus school-based, inspector-led ITT was legislated for, to be implemented by September 1993. Partnership between schools and institutions as to include the use of indicators as evidence of the quality of teaching and learning. CATE was to issue guidance for the development of partnerships between HEIs and schools. Further the transfer of funds from HEIs to schools would be closely monitored. The funding councils would have an additional £6 million available to assist with the implementation of the policies defined in Circulars 9/92 and 35/92 (Welsh Office).

All secondary phase courses were directed to comply with the Government orders by September 1994.

ORIGINS OF POLICY - GOVERNMENT AND INTEREST GROUPS

The relevance of the emergence of the current Government's policy on ITT to this study is that teachers and teacher educators are the subjects of the research presented in the following section of this dissertation.

Following Circulars 9/92, 35/92 (Welsh Office), and CATE's response in November 1992, the renamed Department for Education (DFE) produced the 1993 Blue Paper; The Government's Proposals for the Reform of Initial Teacher Training.

In the introduction to the Blue Paper (DFE, 1993) the DFE explained the general principles which underpinned the reforms to teacher education. These included:

- *the raising of educational standards,*
- *emphasis on competencies,*
- *continuing training and development through working life,*
- *increasing the effectiveness of expenditure on training.*

Each of the above related to themes expressed by various Government bodies since 1979. More specifically the Blue Paper emphasised skills, progress and a wide range of courses which would be assessed by the proposed Teacher Training Agency.

The Blue Paper was heavily critical of existing teacher training courses, highlighting the perception that lack of classroom discipline in schools was a direct reflection of teacher competence. The Government quoted the findings of its own Office for Standards in Education (OFSTED) as justification for changes to teacher training courses. The Government aimed to ensure quality by reducing the length of education courses and increasing the time each student spent in schools. Institutions would be inspected by OFSTED, thus the monitoring system would be Government-led.

The emerging ITT policy was politically driven. Although invited to comment on the policies, professional educationalists were not able to influence any change to its content and direction within the time made available. The key players employed in the development of the ITT policy were all political and/or quasi-political. As an example, the Centre for Policy Studies (CPS) was created by Margaret Thatcher as a right wing *Think Tank* to suggest how policies could be adopted. Education policies were inevitably influenced by this group. The extent of the influence of Government and Government bodies (OFSTED, CATE) on current ITT policy serves to illustrate the limited influence of the relevant professionals and interest groups. The position of local education authorities had changed radically since the ERA (DES, 1988a) and had a limited influence over schools. The place of academics in policy decisions was also limited by changes in the political structure of education.

Fundamental to the change in ITT was the Government's belief that courses were too theoretical, students could and would be influenced by the ideological left. Teachers had become militant and disillusioned, the roots of this, according to the Government, were the socialist beliefs of academics in education. In order to address this issue ITT courses were restricted to practice. The Blue Paper (DFE, 1993, p.4) stated:

> *The best way to learn the classroom skills needed for effective teaching is by observing and working with teachers .*

The function of teacher educators in the development of ITT policy was operational, following directives legislated by Government.

Student teachers participating in ITT courses had not contributed to their design. Perhaps changes to ITT policy matched students needs? PGCE students having completed an academic subject-based undergraduate course required vocational training. However research in the field (Lock, 1990) found that students required more assistance than was available from practising teachers. Lock stated that students had different experiences in their teaching practices, both at primary and secondary level practising teachers were not all willing and/or able to offer the guidance required. Presumably Government policy which intended to guide teachers through the ITT process would attempt to address this issue.

The influence of the civil service within this context should not be ignored. While it was accepted that *only the most senior civil servants will affect Government policy in any significant way,* (Lawton, 1986, p.34), their influence was cause for concern to Margaret Thatcher who reduced public expenditure and civil service manpower (Raynor Report (Lawrence, 1992, p.109)). In addition, prior to the Secretary of State's announcement of the changes to ITT, senior civil servants were removed from the DFE for their criticism of the new plan. Ministers acknowledged that the new plan for teacher training was finished in the teeth of opposition from civil servants.

Teachers, central to the implementation of current ITT policy, had little if any influence on the emerging policy. Barber (1992, p.ix) quoted Sir Frederick Temple's speech to the Newcastle Commission, 1863:

> *Teachers have too exalted a notion of their position and what they have to do.*

This Victorian view based on the dominant ideology of the ruling classes is, apparently, still prevalent today. Since 1979 teachers have become more militant resulting in a negative press with parents. The professional status of teachers is now an issue (Barber, 1992, p.135). However, in contrast to conflict over pay and hours, teachers have passively participated in the implementation of NC and LMS. Competition and efficiency are key words in the educational market. The established position of teachers with security of employment and apparent autonomy in the classroom no longer exists (Lawton, 1986, pp.155-6) resistance to change has been minimal.

CONCLUSION

Within the context of the Government's market place ideology, the development of the ITT policy could be considered as part of a rational planning process. The current ITT policy was developed in order to raise standards by placing student teachers in the classroom for long periods being guided (monitored) by good, experienced practitioners. Institutions, not courses, would gain accreditation for ITT, thus schools could become centres for teacher training.

Existing changes to the ITT policy were incremental. The justification for change (Blue Paper, DFE, 1993) relates directly to the control Government has gained over education since 1979. The stated aims do not hide the implicit aims which are anti-intellectual. Teachers fear de-professionalisation, if teaching is to be regarded as different to other professional disciplines a loss of status would be an inevitable consequence. Educational research would lose the academic freedom it currently enjoys.

The intended outcome has been achieved, schools are to become centres for teacher training. Perhaps an unintended outcome is that schools are now placed in a prime position to negotiate the value of student teachers. The financial implications, benefits and losses are apparent. A direct consequence of the Education Bill (DFE, 1994) is that *it does not contain assurances as to how the quality of the new entrants to teaching will be assured* (The Teachers' Organisation, 1994). The writer considers that the lack of consultation in the field has resulted in a policy built on sand. The Blue Paper (DFE, 1993) claimed that the Government's ITT policy would allow teachers *continuing training and development through working life.* This remains open to question. As the pace of change increases, staff in schools become over-stretched and de-skilled. Inevitably the new initiative will result in a loss of status for teachers as they lack the professional expertise required to train others in their craft. The apprenticeship model for ITT was dismissed by teachers at the end of the 1860s, perhaps it will be dismissed by the Government before the end of the 1990s.

CHAPTER FOUR

METHOD

INTRODUCTION

During the last decade the parameters for educational practice at all levels have moved. Each strata of educational practice, schooling and higher education has altered which has had an inevitable effect on educational research and practice. This chapter is concerned with the method of research. The research aims to generate information relevant to both researchers and teachers. The writer acknowledges that this study will serve only as an introduction to the central issue and the research methodology. This chapter explains what research was intended and describes the methodology employed.

Why the Research was Intended

As a teacher engaged in educational research it was evident to the writer that, with the exception of action research (Chapter 2), theory, research and practice exist as disparate disciplines. If each discipline was to contribute to an understanding of education a greater awareness of their tools, mechanisms, practices and culture would be required. The nature of knowledge and its acquisition should provide the parameters in which pedagogic practice is experienced, therefore an understanding of how knowledge is gained should be fundamental to the practitioner in the classroom. Critical to this issue is how research methodology is applied to educational practice.

The research question has remained constant throughout this study. Is educational theory and research relevant to pedagogic practice in secondary schools in England and Wales? The study hypothesised that educational theory and research is relevant to pedagogic practice in secondary schools in England and Wales. In order to be relevant a relationship should exist. The aim of the research was to identify the relationship between educational theory, research and practice in secondary schools.

Given the range of changes to educational practice the research focused on ITT, both for its relevance to this dissertation and for the practical dimension offered by this area of education. Changes to ITT programmes were among the many policy decisions made by the Government. An outcome of these changes was the reduction of theoretical elements in the courses leading to qualified teacher status. The implication was that policy advisors were directing the Government to focus teacher training courses on the practical at the expense of the theoretical. This led the researcher to ask; *Is there a relationship between educational theory, research and practice in secondary education?* If knowledge of education was withdrawn from the ITT curriculum how would teachers gain an understanding of educational theory, research and practice? Chapter 1 of this dissertation has shown that an understanding of educational theory and research by practitioners is critical to the development of the relationship between theory, research and practice in education. If education is to be understood by those guiding others through the educational process knowledge and experience of theory and research is essential.

What Research was Intended

The debate surrounding research methods in education has set quantitative methodology against its qualitative counterpart. This study accepts that each has much to offer the researcher in defining the events that take place in educational practice. This research focuses primarily on identifying what relationship exists between theory, research and practice as perceived by those employed as secondary school teachers. The research tool, a questionnaire/survey, although of positivist origins will be used as a basis for qualitative research at a later stage (post-dissertation) of this investigation. The research methods of the positivist tradition are firmly rooted in scientific practice (Chapter 1). The culture of educational research may differ from that of educational practice, this study recognises that sub-cultures also exist within each.

The process of investigation focusing on the relationship between theory, research and practice in secondary education will require practitioners to state whether theory and research does influence practice. In doing so the investigation will also identify differing approaches to academic study, those of advisors, teachers and teacher educators.

How the Research was Done

The research questionnaire was issued to secondary school teachers, teacher educators, and LEA advisors. Sampling techniques were applied to the research. Each predefined sub-group within secondary education was represented, thus incorporating a cross-sectional design. The data collection took place at one point in time from a sample representing two or more groups. The survey population was self-selecting (Kerlinger, 1986, p.349) in that the body of staff from each school, office and HEI was approached by the researcher as a whole.

QUESTIONNAIRE DESIGN

There was no existing model for examining the identified area of research, therefore the development of a suitable mechanism was critical to the success of the study.

The questionnaire was presented as a document which contained an introduction (Appendix 12) which detailed the focus of the research. The length of the questionnaire, and its introduction were pertinent to its completion. Teachers and teacher educators were swamped by Government initiatives throughout the period of study. The researcher considered 10-15 minutes to be sufficient time to complete the questionnaire. An intrinsic aim of the questionnaire was to produce a relevant piece of research for this study. The researcher was aware of the difficulties experienced by teachers when approaching an academic questionnaire. The process of developing the mechanism for research attempted to resolve several of these difficulties. It was imperative that all teachers participating had an understanding of each question and statement contained in the questionnaire.

Given the diversity of experience in the training of secondary school teachers the views of professional colleagues were considered of prime importance to the research. Each period of training may have led teachers through the study of educational theory and research, knowledge of this was critical to the research. Each respondent's understanding of education would be determined by their experience during training and their practical experience of teaching at school or university.

An indication of the respondents' commitment to the research would be their willingness to participate in a later phase. Perhaps a more relevant measure would be their interest in receiving the results of the questionnaire as this would involve finding the time to read the document. The researcher expressed gratitude to respondents both in the introduction and conclusion of the questionnaire. The questionnaire contained details of each phase of the research to enable respondents to place themselves within the structure of the research as a whole. The researcher, as investigator, was in contact with all respondents during the period of research. The process of developing the questionnaire is detailed in the following chapter (Chapter 5).

When designing the questionnaire the researcher focused on the research question. Is educational theory and research relevant to practice in secondary education? The questionnaire also attempted to identify whether there is a relationship between theory, research and practice. The researcher identified four concepts which provided the framework for the questionnaire:

1) Theory.
2) Research.
3) The relationship between theory and practice.
4) The relationship between research and practice.

Each concept would be examined according to the respondents' attitudes, beliefs, knowledge and attributes. The questionnaire (Appendices 6-10) was designed in four sections.

Section A, Part One (Appendix 6) concentrated on whether the respondents had engaged in a period of study relating to education, psychology, philosophy, sociology, curriculum development, educational research or action research. Questions also focused on whether respondents had participated in educational research. Each question determined the experience and subsequent knowledge gained by the respondents as a consequence of their studies. To establish their attitude towards each area of study the researcher asked directly whether the respondents considered that theoretical courses were relevant to educational practice. The researcher had intended that these questions would also provide an insight into the respondent's understanding of educational theory and research methodology.

Section A, Part Two (Appendix 7) continued to focus on the relationship between theory, research and practice in education. Respondents were asked questions which attempted to determine their beliefs relating to the issues emanating from this research. Each question led the respondents to focus their thoughts on how theory and research influence practice in real terms. By establishing the respondents' beliefs the researcher intended to examine elements of the research, theory and practice equation. The relevance of research to practice was given high profile within this section.

In response to both parts 1 and 2 of Section A, respondents were asked to complete a Likert type scale. A Likert scale consists of five columns, each of which indicates the respondent's opinion in relation to a question/statement. Whether they strongly agree, agree, disagree, strongly disagree, or do not know, respondents were required to select one column in answer to each question/statement. The results were subsequently collated on a five point scale.

Section B (Appendix 8) consisted of ten statements. Respondents were asked whether they agreed with each statement. The statements were provocative in that they attempted to represent opposing views in order to prompt respondents to comment. Respondents were asked to indicate their response on a bi-polar scale which consisted of five columns from strongly agree to strongly disagree

Section C (Appendix 9) focused on educational practice. The parameters for each question were determined by the researcher in order to examine respondents' knowledge of teaching. A fundamental issue was whether teaching could be taught. In addition, the researcher asked the study population whether teachers should engage in educational research and generate theory. Each question would serve to illuminate issues surrounding the central focus of the study; Is educational theory and research relevant to practice? Respondents were asked to complete a bi-polar scale (see above) in response to each question.

Section D (Appendix 10), the attributes of each respondent were considered to be variables which could provide the framework for analysis of the data. The respondents' experience of practising teaching in secondary schools would vary according to their status and training. Essentially, the diversity of backgrounds among staff within each HEI and school would influence practice. Respondents were required to complete a grid which would provide details of their training and professional practice.

The research was, by definition, non-experimental. The population was not required to follow a course of treatment which would affect their judgement on the central issue. At

each stage (Phases I-IV), the questionnaire was administered by the researcher.

A final section was added to the questionnaire (Appendix 9b) in Phases I, II and III of its design (Appendices 1, 3 and 5). This was to enable the researcher to develop the design of the questionnaire in consultation with the sample population. This section also asked respondents to comment on the presentation of the questionnaire which was critical to the successful completion of the research. It is axiomatic that each question would have to be understood by the respondents. The study population would also need to understand the response mechanisms. As respondents were asked to focus on a central issue the researcher asked the study population whether they considered that each question related to the stated issue.

All questions required an immediate response. The nature and design of the questionnaire was considered to be critical to the enquiry. The questionnaire was presented in booklet design, attractive, and easy to complete.

SURVEY POPULATION

The geographical limits to the study set by the researcher were determined by time and finance. The researcher was a part-time student in full-time employment and was also self-financing. The research was therefore based within a 60 mile radius of the researcher's home. The survey population was selected by the researcher as a random sample, using a cross-sectional design as described by Wiersma (1991). The sample population were those engaged in educational practice at secondary level. Schools were identified by the researcher in two local education authorities. Each secondary school was known to the researcher. The college of education was also known to the

researcher, a partnership between the researcher's school and the college of education had been established prior to this study. The universities were contacted through the researcher's colleagues on the doctorate course. The final cohort did not include local education advisors, as these were no longer "safe" posts within local education authorities.

INSTRUMENT DESIGN ANALYSIS

The non-experimental design of the questionnaire focused the analysis. The results served to illuminate the central issue in relation to the attributes of each respondent. The results would therefore produce indicators which would predict events, rather than explain events as explanatory indicators would do. Put simply, the questionnaire would determine the views of the respondents, not why they held those views. The design and analysis of the questionnaire would remain constant throughout each phase of its development as the parameters had been set by the researcher.

Summary tables of the results of each phase of the development of the questionnaire (Phases I-IV) enabled the researcher to examine the reliability of the research process. The external validity of the questionnaire was determined by the central issue; that educational theory and research related to pedagogic practice. The results from the questionnaire are generalisable, in that the random sample was representative of a cross-section of the population engaged in educational theory, research and practice.

PRESENTATION OF RESULTS

Each section of the questionnaire was analysed separately to enable the researcher to identify responses to each of the variables and attributes incorporated into the research. As stated, the personal attributes of the survey population were set against responses which formed the framework for presentation and subsequent analysis of the data. Each table contained cells which were representative of each attribute. The percentage of the survey population contained in each cell was then divided according to their response.

CONCLUSION

The researcher designed the questionnaire as part of a larger investigation which will incorporate qualitative methodology. It is intended that this study will lead to further research. The researcher will have investigated what is happening in the field of enquiry, further research would both re-examine the methodology of the study, and determine why theory, research and practice in education are disparate disciplines.

CHAPTER FIVE

THE PROCESS

INTRODUCTION

The previous chapter described how the questionnaire which generated the research data was designed. The design process was completed in four phases. This chapter is concerned with how the research was conducted at each phase of the questionnaires development. During the design period the researcher also completed the literature search and found that there were no existing models for the questionnaire. The researcher is indebted to all participating teachers, teacher educators and advisors who contributed to the research process.

PHASE 1

This stage of the research produced results which were pertinent to the design of the questionnaire. The results also provided the researcher with a structure on which to base the analysis of data. Key factors which emerged enabled the researcher to develop the design of the questionnaire.

The questionnaire (Appendix 1) was administered by the researcher to colleagues at a co-educational comprehensive school in the suburbs of a major English city during December 1993. A total of thirty questionnaires were issued to a random sample which included teachers, middle managers and senior management. The researcher also issued questionnaires to three advisory staff employed by the local education authority. The advisors were known to the researcher through various committees. The final cohort of

respondents consisted of teacher educators employed at a college of education in the west of England. Five questionnaires were sent by post to a teacher educator known to the researcher. The teacher educator then issued the questionnaires to colleagues.

Respondents were given two days to complete the questionnaire. All thirty eight questionnaires were completed and returned to the researcher within the specified time. This was of interest to the research as:

1) December is traditionally a bad time to research.
2) Not all of the respondents were known for their enthusiasm to complete paper work.
3) The teacher educators were not known to the researcher.
4) Two of the three advisors were awaiting notification of redundancy.

Results

Comments relate to the design of the questionnaire not the results.

1) All questionnaires were completed within the specified time.
2) The introduction needed to be revised. The use of technical terms, e.g. *ontology*, was confusing for the majority of the respondents. The inclusion of a commentary from the main body of the study was deemed unnecessary.
3) Section A, Part One required further clarification, not all respondents had gained knowledge of educational theory and research as undergraduates. The response grid (Likert scale) required modification in order to accommodate the diversity of the respondents' experiences during teacher training. A further consideration was

that not all respondents had attended teacher training courses.

4) Section A, Part Two required similar alterations to Part One. Further explanation of several statements were suggested by the respondents, who also requested questions which would require negative as well as positive responses.

5) Section B generated the most comment and this was not only in response to the questions. Respondents found that whilst the statements contained opposing views they were able to agree with both. (Evidence of the turbulent nature of education ?) The comments relating to the questions were informative and relevant to the central issue. Several respondents requested a change in the style of response to questions in this section. The researcher felt that a change in direction was the only means of resolving the problems. A bi-polar scale was adopted and the number of statements reduced, thus allowing respondents to express the level of their agreement with each statement. A place for comments was requested, not in direct response to each statement but as a means for the respondents to express their own beliefs within their own framework. In essence, Section B was restructured to allow respondents to comment on the central issues.

6) Section C also required amendments, although not in as much detail as Section B. By focusing on teacher training the researcher had provided a structure for questioning. Changes were to incorporate the avoidance of duplication, further clarification of concepts and the replacing of the response grid with a bi-polar scale.

7) Section D received less comment from respondents. The only additional variable suggested by the respondents was the precise discipline studied. This was not included in further phases of the research.

Phase I - Summary

The researcher did not complete a full analysis of the data collected in Phase I as the focus at this stage was the questionnaire design. The responses were considered as the researcher prepared the way for data analysis at Phase IV. Several points of interest emerged which, at this stage, can only be expressed in general terms.

1) Teachers (secondary school colleagues) were willing participants. As respondents, teachers did not question theoretical and research statements. However they did add their comments to the opposing view points, as defined by the researcher, which reflected their support for education as a practice. The teachers, whilst not anti-intellectual, defended their corner against university and college departments. The main criticism directed by teachers at the questionnaire was the time factor. This was not unexpected, given the considerable pressure created by Government initiatives throughout the period of research.
2) In contrast to teachers and teacher educators, advisors were less critical of both the questionnaire and its contents. If *toeing the party line* was on their agenda, then the advisors displayed compliancy towards every question asked. The advisors were extremely grateful to the researcher for including their views in the study. At a time when LEA advisory staff were at risk of unemployment, sycophantic responses might have been expected.
3) The most valuable responses in terms of questionnaire design were those received from the teacher educators. The detailed criticisms of the questionnaire were well-informed, and provided invaluable assistance to the researcher during its redesign. An important point for consideration was that teacher educators understood the language of the research and were able to comment accordingly.

PHASE II - PILOT STUDY

The revised questionnaire (Appendix 3) was administered by the researcher during the Spring Term 1994. As stated, the design of the questionnaire had been amended according to the criticisms received in Phase I of the research. The questionnaire was completed by thirty teachers employed at a co-educational comprehensive school situated on the outskirts of a market town in a rural county. A further eight questionnaires were completed by teacher educators employed in two colleges of higher education (education departments). The final cohort comprised three advisory teachers employed by the same LEA as the previous cohort of advisory teachers. All forty one questionnaires were completed within the stipulated time, two weeks. The researcher had extended the period of research as all respondents were not known. A letter accompanied each questionnaire (Appendix 2) as an introduction to the research. At this stage the researcher attempted to;

1) review the questionnaire design,
2) produce a programme for data analysis.

The respondents' collective attitude towards the questionnaire did not differ greatly from Phase I of the investigation. The sub-groups identified in the survey population produced results consistent to their type, i.e. teachers-practical, advisors-compliant, teacher educators-challenging.

Results

1) All questionnaires were completed within the specified time.

2) Section A, Part One. This section focusing on theory and research as experienced by each of the respondents required further qualification. Each reference to course was unclear, a period of study could have related to either an undergraduate or post-graduate course which would have differed in both context and content. Education (Chapter 1) is multifaceted, it would appear that training has in the past lacked consistency. Respondents also commented on the lack of a title which would have provided a focus for this and other sections.

3) Section A, Part Two. The response grid for this section required further clarification. Clear indications of positive and negative responses would increase the speed in completing the questionnaire. Each statement appeared to be understood by respondents, although a few minor adjustments were advised.

4) Section B. Again this section received the most comment. A response grid was suggested to enable ease of clarification. Several statements were criticised as dogmatic. As the researcher intended to provoke a response this criticism was only noted. Respondents suggested that a space for comments would allow further qualification of their responses.

5) Section C. The response grid was completed and therefore understood by all respondents. There were suggestions as to how improve the quality and clarity of the response grid which were incorporated into Phases III/IV of the questionnaire design. That is lines were introduced to indicate the position of response on the bi-polar grid. Further clarification of three of the thirteen statements was also required, this was completed.

6) Section D. No additional variables were added. Further clarification of where

respondents had trained was requested. This would be developed in Phase III, as the diversity of teacher training courses is a critical issue relating to the study.

Phase II - Summary

1) The positive approach of respondents to the questionnaire design was critical to the success of this study. At the pilot study phase respondents were able to suggest key changes which would assist in the analysis of data; e.g. headings for each section, clarification of statements, improvements to response grids, and space for additional comments for qualification of responses.
2) The majority of respondents expressed an interest in the study, they were prepared to participate in the research at a later stage.

PHASE III - RE-DRAFT

The revised questionnaire (Appendix 5) was designed by the researcher during April 1994. The design of the questionnaire was amended following the criticisms received during the pilot study. The questionnaire was then completed by thirty teachers, colleagues of the researcher (see Phase I). A further five questionnaires were completed by teacher educators employed in university schools of education. There were no advisory teachers consulted at this stage as the LEA had dismissed the majority of them. The researcher considered that in such a climate it would not be appropriate to approach the remaining advisors. All questionnaires were issued by the researcher in person. The questionnaires were completed within the first 5 days of the Summer Term 1994. There were no spoilt papers, all thirty five were completed.

Many of the respondents had been involved in Phase I of the research. The participation

of these colleagues proved invaluable. They identified the changes to the questionnaire and were satisfied with the results of their earlier criticisms. At this stage the researcher intended to;

1) verify alterations to the questionnaire,
2) identify any changes as a consequence of Phase III.

The respondents were able to complete the questionnaire and comments on the design were minimal. The positive approach of colleagues towards the questionnaire was encouraging, particularly as this was an extremely busy period of the academic calendar. As with earlier results sub-groups identified in the study population emerged. The exclusion of advisors focused the researcher's attention on cohorts of teachers and teacher educators; differences in response by cohorts of university graduates and college of education graduates appeared.

Results

1) Section A, Part One. The researcher had incorporated qualifications within the response grid (Appendix 5), this made it difficult to complete. However it did clarify the respondents' period of study, undergraduate or postgraduate.
2) Section A, Part Two, Section B and Section C. There were no criticisms of these sections and the questionnaire therefore remained unchanged.

Phase III - Summary

The support of colleagues in completing this phase of the questionnaire was sufficient evidence for the researcher to embark on Phase IV of the research. The majority of

respondents had participated in Phase I of the development of the questionnaire. Participants involvement at this phase served as an endorsement of their understanding of the questionnaire. Respondents were able to suggest changes, although these were minimal. Interestingly the majority of the respondents maintained sufficient regard for the study to complete the questionnaire and request readership of the dissertation when finished.

PHASE IV - THE QUESTIONNAIRE

The research instrument, having completed three phases of development, was administered to the study population during May 1994. Schools and HEIs were selected on the basis of geographical area and accessibility to the researcher. As explained (Chapter 4), the final population did not include a cohort of advisors. The questionnaire was completed by sixty six teachers from three schools situated in the west of England, and also by eleven lecturers from three HEIs situated in the south and west of England.

The schools were considered by the researcher to represent the differences which exist between schools as institutions within secondary education.

School A

A city single-sex independent school with 1,000 pupils aged 7-18. The sixth form is co-educational and the majority of its students continue into higher education including the universities of Oxford and Cambridge. Staff at this school tend to be static because of the desirability of the city and school. The researcher was employed at this school, (1986-1989) as assistant director of music.

School B

A rural, co-educational, comprehensive school with 1,200 pupils aged 11-18. It is the only comprehensive school in its area therefore its catchment is secure. The pupils are, with few exceptions, from middle-class homes. However, their ability is comprehensive. Staff changes tend to be similar to other schools within the authority i.e. mixed periods of tenure. The school was known to the researcher through her work on pupil behavioural problems.

School C

A semi-rural co-educational comprehensive school with 1,800 pupils aged 11-18. The schools senior management team was experiencing difficulties at the time of the research. The headteacher was on extended sick leave and a deputy headteacher had opted for early retirement. The catchment area included pupils whose parents were employed in management, light industry, farming, shops, civil service and business. A large number of parents had experienced redundancy in the previous 5 years. Pupils were of mixed ability and the majority of school leavers continued into further education to pursue vocational courses. The researcher had directed music groups within the school and was known to a number of the staff.

Higher Education Institutions - College

The college is situated on the outskirts of a major city in a rural location and is recognised for its emphasis on the arts and education. Many of the students were located for teaching practice in schools known to the researcher. The researcher had previously collaborated with the director of PGCE students.

University A - School of Education

The university is situated across a large metropolitan city in the west of England and its school of education is established as both a training and research institution. The researcher is a postgraduate student at the university.

University B - Department of Education

This university is an established red-brick university in the south of England. The department of education is situated in the suburbs of an industrial town, in buildings previously accommodated by a music college. The university is currently increasing its status within the field of educational research. The Dean of Education is a postgraduate colleague of the researcher.

The questionnaires were distributed in person by the researcher (thirty to each school, ten to each HEI) during the second week of the summer term 1994. Respondents were asked to complete the questionnaire within two weeks. The questionnaires were collected by senior managers in each institution. Sixty six out of ninety (73%) questionnaires were completed by teachers and eleven out of thirty (37%) questionnaires completed by university lecturers. There was, therefore, a total of seventy seven out of one hundred and twenty (64%) questionnaires completed and returned within the stipulated 2 week period. The results were then collated by the researcher using Microsoft Excel. Results are shown in Chapter 6.

CREATION OF DATABASE

The available software, time and database knowledge necessitated the use of Microsoft Excel to generate a simple database. This limited the ability to extract data identified

during the analysis process. The stages to create the database were:

1) A template of responses to the questionnaire was produced which allowed the researcher to present the raw data. Short format entries were used to reduce the input time.
2) Rigorous checking of the raw data.
3) Approximately one hundred tables were produced from the summary tables. Having created the first 10 tables, subsequent tables involved duplication of the format with minor amendments.
4) Further tables were produced which accessed information required by the researcher completed by repeating 3).
5) Each table was checked against the raw data.
6) Tables were printed and incorporated into the main text.
7) Tables were revised according to size and distribution of the survey population across each cell for clearer presentation of data.

RESEARCH METHODOLOGY - CRITICAL ANALYSIS

The research methodology was determined by the research question. Is educational theory and research relevant to practice in secondary schools? There were no existing models for the questionnaire. The researcher designed the questionnaire as described in Chapter 4. The problems which emerged throughout the development and implementation of the research tool were as follows:

1) Questions, wording of which required clarity.
2) Introduction, as described in Phase I, the terminology used proved too complicated

for the study population to understand.

3) Presentation of grids, the size needed amending.

4) Definition of terminology throughout the questionnaire required amendments.

5) Distribution of questionnaires was time consuming and expensive.

6) Respondents were not always available , i.e. advisors.

7) The detail included in some of the tables was so extensive that printing of the data was difficult.

8) The questionnaire was not designed within the limits of spreadsheets. The researcher had overestimated the capacity of each spreadsheet to present the data.

9) The number of possible entries for questions (Section B) made it difficult to set out in tabular form on the database. Asking respondents to select a) or b) in Section B this did not fit within the format of the 5 point scale therefore the analysis required 2 stages. These were first to determine respondents selection of a) or b), and secondly to determine the strength of their opinion, ranging from strongly agree to strongly disagree.

10) It was not clear during the initial stages of analysis how the tables would be used and what the outcome would be. This was a significant factor as there were no existing models for this research.

11) Each search was set against a single variable. Therefore each cell contained relevant data on a 5 point scale for each question.

12) There were no attempts to apply statistical techniques to analyse the data. Nevertheless statistical techniques could be applied during subsequent stages of this research using the existing data.

13) The time needed to create the database was not fully understood by the researcher.

14) Additional information i.e. mode, mean, median was beyond the spreadsheet

capability.

15) The large number of tables required a considerable amount of time to check and analyse. This process was illuminating and provided a further dimension to the analysis of the data.

RECOMMENDATIONS

When re-designing the questionnaire, the researcher should consider all database requirements and limitations which would avoid problems with the design at an operational level. For example, the number of entries generated by the study questionnaire created difficulties with the presentation. The amount of data was too large for the spreadsheet capacity and subsequently the print size on the existing spreadsheet was illegible.

The difficulties in setting out the information in tabular form were compounded by inconsistencies within the questionnaire. In Section B, for example, asking respondents to compare two statements their response was not consistent with the 5 column entries of Section A, Parts One and Two. Consequently a further stage was required in the process of analysing the data so that it could be applied to the 5 column format. This could have been changed at an earlier stage in the development of the questionnaire if the researcher had been aware of the data-base format. The process of formatting the data was compounded by the lack of existing models.

At a basic level the generation of a large number of tables was time consuming. The process of analysing and checking the data was very involved and required both manual and computer checks.

A solution to the above issues would have been the simultaneous development of the questionnaire and database, which had not been fully understood by the researcher. Limited knowledge of computer software therefore prolonged the process of collating and analysing data. Further analysis of the data would have been possible if statistical software had been applied, and this may have provided support for the conclusions drawn from the data.

CONCLUSION

The generation of a questionnaire without existing models is a creative process. The consequent analysis of this process should produce guidance for the development of further research. As a mechanism for generating data the study questionnaire was a valid and reliable research tool. The questionnaire was completed by the researchers colleagues and other professionals from schools and higher education institutes. The completion and return of each questionnaire provided validation of the research process. This tool could therefore be replicated at a later stage. The researcher recommends that further research in this area of study should follow.

This chapter has described the process of developing the questionnaire design and its implementation. The recommendations and commentary provide a framework for further research within this field of study.

CHAPTER SIX

DESCRIPTION OF RESULTS

INTRODUCTION

The description of the research results is divided into two sections. This chapter will present part one and will examine the data which emerged from the questionnaire. Part two (Chapter 7) will examine the application of theory to practice in direct response to questions which have emerged throughout the dissertation and will be presented in the following chapter.

The statistics applied throughout the analysis are rudimentary. In all cases scores will be given as a percentage of the total population. Tables will be used as exemplars of a typical response to questions contained in each section of the questionnaire. Should research continue beyond this dissertation further statistical tools will be required. The non-experimental design of the questionnaire focused the analysis of variables contained in each cell of the data. Each result would indicate what had happened in the case of each respondent's training leading to and beyond qualified teacher status. In addition the results would indicate whether respondents believed that their training was relevant to any subsequent practice in education.

ANALYSIS OF DATA

Each of the sections of the questionnaire will be analysed separately in relation to the attributes of the respondents. Comparisons between the distribution of scores from each of the sub-groups will be possible by presenting summary tables of responses to each question. Each section of the questionnaire focused on differing perspectives of the central issue, the relationship between educational theory, research and practice. Section A concentrated on respondent's attitude towards theory and research. Section B examined the respondent's beliefs in the existing mechanisms for educating teachers. Section C illuminates respondent's knowledge of the relationship between educational theory, research and practice within the context of educating teachers. Section D provides the framework for analysis in determining the attributes of each respondent in terms of age, gender, training and professional experience. Section A, parts 1 and 2, required respondents to complete a Likert type grid which, on a 1-5 scale, enabled positive, negative and do not know responses. Sections B and C required respondents to complete a bi-polar scale indicating the level of their agreement with statements. Each section of the questionnaire was introduced with a clear explanation of the content and an indication of the outcome.

As described in the previous chapter (Chapter 5) the questionnaire was distributed to a population of 120; teaching staff from 3 comprehensive schools and 3 HEIs participated in the process. The distribution of the questionnaires in the schools was via a senior teacher, and in the HEIs was via research officers. From the 120 issued the researcher received 77 completed questionnaires, there were no spoilt papers. The response from schools was 73%. The percentage of returns from HEIs was significantly lower, 37%.

The total response was 64% of the study population. The analysis of data based on the relationship between respondents' attributes and the scores given is as follows.

Tables will be shown at the end of each section.

SECTION A - THEORY, RESEARCH AND PRACTICE, PART ONE :

Formal Study of Educational Theory and Educational Research (Appendix 6)

Each respondent was asked whether they had studied educational theory (theory, psychology, sociology, philosophy and curriculum development) and educational research. Respondents were also asked to indicate whether or not the study of educational theory and research was relevant to educational practice. When replying to whether they had studied aspects of educational theory, respondents were to indicate the period of study as not at all (1), 12 weeks (2), 24 weeks (3), 36 weeks (4), or if they did not know the length of the study (5). Each period related to a number on the grid on a 1-5 scale. In response to whether or not the period of study was relevant to practice participants were asked to indicate on a 1-5 scale from not at all (1), very little (2), most (3), the whole course (4) or do not know (5).

The tables used to illustrate responses to Section A, Part One are presented as combined scores. The researcher considered that through the combining of scores 1 with 2, and 3 with 4, a wider interpretation of the results could be presented. Given that not at all and/or 12 weeks represents a more limited course in educational theory than 24 weeks and/or 36 weeks the researcher believed that the combined scores could provide more conclusive evidence of the nature of teacher training than individual scores for each response. Thus, should a respondent consider that very little of a course was relevant to

educational practice and/or the course was not at all relevant (1 and 2), the researcher believes this to be a negative response. In contrast if a respondent considered that most or the whole course was relevant to educational practice (3 and 4), the researcher believes this to be a positive response.

Question 1a) *I have studied educational theory*

Responses to questions 1-5 of Section A Part One were similar if not the same from each group of respondents. Table 1 indicates that the majority of respondents had not participated in educational theory courses for a period of more than 12 weeks during teacher training. Further investigation reveals that those respondents trained in the 1970s were less likely to have participated in educational theory courses in contrast to those trained before 1970 or during the 1980s.

Question 1b) *The educational theory course was relevant to practice*

In terms of educational research those respondents who considered themselves to be researchers were more likely to have engaged in the study of educational theory. In contrast to Table 1, Table 2 reveals that the majority of respondents were of the opinion that educational theory was relevant to educational practice.

On closer examination of whether respondents participated in psychology, sociology, philosophy or curriculum development courses, the majority of respondents had participated in short courses i.e. 12 weeks for each discipline. This corresponds to comments found earlier in this study (Chapters 3), teacher training courses had, in establishing an academic basis for education, *borrowed* from the social sciences. As a consequence many student teachers throughout the 1970s and early 1980s participated in

social science courses taken direct from established practice. Interestingly, in response to whether or not the study population had participated in philosophy courses, there was a slight increase in those who did not know.

Question 4b) *The educational theory course (philosophy) was relevant to educational practice*

Results also revealed that the majority of the study population were not of the opinion that psychology, sociology and philosophy were relevant to educational practice (Table 3). The respondents had previously indicated (Table 2) that the study of educational theory was relevant to practice. These findings have implications for ITT courses. The inclusion of social sciences and curriculum development within ITT courses would mean a change to current practice.

Question 5a) *I have studied curriculum development*

The study of curriculum development (Table 4) received less positive responses from those trained in the late 1970s/early 1980s in comparison to those trained in the early 1970s and late 1980s. This reflects the curriculum work of the Schools Council (1970s) and the introduction of the NC following the ERA (DES, 1988a). It would appear that ITT courses have been influenced by Government initiatives. Where school curriculum schemes have been in operation the ITT curriculum has altered accordingly. This indicates that ITT students are required to know what is happening to educational practice.

Question 5b) *The curriculum development course was relevant to educational practice*

The study of curriculum development was considered to be less relevant to educational practice than educational theory, compare Table 5 with Table 2. Generally those engaged in educational theory and/or research considered the study of both educational theory and curriculum development to be relevant to practice.

Question 6a) *I have studied educational research*

Participation in educational research received a negative response in the majority of cases. The few respondents who considered themselves to be action researchers (12%) or educational researchers (16%) had no or limited experience of the study of educational research. Table 6 is an atypical exemplar of the study population's response to questions 6a-9a relating to educational research. It would appear that the majority of the education profession engaged in secondary school teaching had not participated in educational research although there was a slight proportional increase in the cell representing those trained between 1986-1990. This data implies the need for educational research to be more closely related to educational practice. The study of education would benefit from collaboration between researchers and practitioners. The existing relationship creating disparate disciplines requires further investigation leading to change.

Question 6b) *The educational research course was relevant to educational practice*

Given the number of respondents who had not participated in educational research it was not surprising that the majority of the study population considered that educational research was not relevant to educational practice (Table 7). The more positive responses were from teacher educators, educational researchers, educational theorists and students

of education, i.e. those engaged in educational research. This was also reflected in the responses from those who had studied education at undergraduate (B.Ed/Dip.Ed) and post-graduate (M.Ed) level.

The data indicates that to participate in educational research there is a need to study educational research. The respondents who had not studied or participated in educational research were unable to respond in a positive manner. The implications of these results are far reaching. Teachers and researchers should collaborate, teachers should research and researchers teach.

CONCLUSIONS - SECTION A, PART ONE

The majority of the study population had studied psychology, sociology and philosophy which had transferred knowledge from the social sciences to education. In contrast only a minority of the respondents had studied educational theory for a period of more than 12 weeks. However the results did reveal that the majority of respondents considered educational theory to be relevant to educational practice. By developing courses which included elements of the social sciences ITT had gained academic status. The relevance of such courses to educational practice was, apparently, rarely questioned (Chapter 3). As shown the study population was inconsistent in its response to the relevance of educational theory to practice. Where questions were based on personal experience the study population responded negatively. In contrast when questions were based on what should be contained in ITT programmes the responses were positive.

The results also revealed that respondents engaged in educational research, theory or teacher education were more likely to have studied educational theory than teachers.

Teachers were also less likely to relate educational theory to practice. However, an understanding of educational knowledge would appear to enhance practice.

The study of curriculum development was considered by respondents to be more relevant to practice than the study of social sciences. These results reflect what the study population believe should happen in contrast to their own experiences (Table 5). Similarly while the majority of the members of the study population had not participated in educational research (Table 6) they agreed that educational research should be on the ITT curriculum (Table 7). This reflects the need to study educational research in order to participate in educational research.

Results have supported the view that educational theory, research and practice exist as disparate disciplines. The study population agreed that the ITT curriculum should include the study of educational theory and research, and that the ITT curriculum should be relevant to practice.

Question 1a) *I have studied educational theory*

Table 1

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																							
	17	12	7		15	11	15																					
	22%	16%	9%	47%	19%	14%	19%	53%																				
Age	Under 30				Under 40				Under 50				Under 60				Over 60											
	5	5	0		10	3	9		14	11	11		3	4	2		0	0	0									
	6%	6%	0%	13%	13%	4%	12%	29%	18%	14%	14%	47%	4%	5%	3%	12%	0%	0%	0%	0%								
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D											
	2	3	3		22	6	10		1	8	8		4	6	1		0	0	0									
	3%	4%	4%	11%	30%	8%	14%	51%	1%	11%	11%	23%	5%	8%	1%	15%	0%	0%	0%	0%								
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other							
	26	20	20		0	0	0		4	1	1		0	0	0		2	1	1		0	0	0					
	34%	26%	26%	87%	0%	0%	0%	0%	5%	1%	1%	8%	0%	0%	0%	0%	3%	1%	1%	5%	0%	0%	0%	0%				
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years							
	10	11	7		9	6	4		3	3	6		7	0	2		2	3	3		1	0	0					
	13%	14%	9%	36%	12%	8%	5%	25%	4%	4%	8%	16%	9%	0%	3%	12%	3%	4%	4%	10%	1%	0%	0%	1%				
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other											
	16	10	11		9	7	10		4	3	0		3	2	1		0	1	0									
	21%	13%	14%	48%	12%	9%	13%	34%	5%	4%	0%	9%	4%	3%	1%	8%	0%	1%	0%	1%								
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years							
	12	12	9		9	6	7		5	3	4		4	0	1		2	1	1		0	1	0					
	16%	16%	12%	43%	12%	8%	9%	29%	6%	4%	5%	16%	5%	0%	1%	6%	3%	1%	1%	5%	0%	1%	0%	1%				
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		4	4	3		7	6	5		8	2	8		1	2	3		7	6	2		3	0	0	
	1%	4%	0%	6%	6%	6%	4%	15%	10%	8%	7%	25%	11%	3%	11%	25%	1%	3%	4%	8%	10%	8%	3%	21%	4%	0%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other											
	5	8	9		5	7	4		20	7	9		0	0	0		2	1	0									
	6%	10%	12%	29%	6%	9%	5%	21%	26%	9%	12%	47%	0%	0%	0%	0%	3%	1%	0%	4%								
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	27	23	15		6	6	3		12	9	4		2	5	2		15	10	13		5	6	1		7	6	2	
	35%	30%	19%	84%	8%	8%	4%	19%	16%	12%	5%	32%	3%	6%	3%	12%	19%	13%	17%	49%	6%	8%	1%	16%	9%	8%	3%	19%

Question 1b) *The educational theory course was relevant to practice*

Table 2

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	16	19	1		12	28	1																	
	21%	25%	1%	47%	16%	36%	1%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	5	5	0		6	15	1		15	20	1		2	7	0		0	0	0					
	6%	6%	0%	13%	8%	19%	1%	29%	19%	26%	1%	47%	3%	9%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	5	1		15	22	1		7	10	0		1	10	0		0	0	0					
	3%	7%	1%	11%	20%	30%	1%	51%	9%	14%	0%	23%	1%	14%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	25	39	2		0	0	0		1	5	0		0	0	0		1	3	0		0	0	0	
	33%	51%	3%	87%	0%	0%	0%	0%	1%	7%	0%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	10	18	0		7	11	1		2	10	0		7	2	0		2	5	1		0	1	0	
	13%	23%	0%	36%	9%	14%	1%	25%	3%	13%	0%	16%	9%	3%	0%	12%	3%	6%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	16	20	1		9	16	1		2	5	0		0	6	0		1	0	0					
	21%	26%	1%	48%	12%	21%	1%	34%	3%	6%	0%	9%	0%	8%	0%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	19	1		7	14	1		2	10	0		4	1	0		2	2	0		0	1	0	
	17%	25%	1%	43%	9%	18%	1%	29%	3%	13%	0%	16%	5%	1%	0%	6%	3%	3%	0%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		5	6	0		5	11	2		8	10	0		2	4	0		5	10	0		2	1	0	
	1%	4%	0%	6%	7%	8%	0%	15%	7%	15%	3%	25%	11%	14%	0%	25%	3%	6%	0%	8%	7%	14%	0%	21%	3%	1%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	3	18	1		7	9	0		17	18	1		0	0	0		1	2	0					
	4%	23%	1%	29%	9%	12%	0%	21%	22%	23%	1%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	24	40	1		5	10	0		6	18	1		3	6	0		10	26	2		4	8	0		4	11	0	
	31%	52%	1%	84%	6%	13%	0%	19%	8%	23%	1%	32%	4%	8%	0%	12%	13%	34%	3%	49%	5%	10%	0%	16%	5%	14%	0%	19%

Question 4b) *The educational theory course (philosophy) was relevant to educational practice*

Table 3

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	19	16	1		21	17	3																	
	25%	21%	1%	47%	27%	22%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	5	5	0		13	8	1		19	15	2		3	5	1		0	0	0					
	6%	6%	0%	13%	17%	10%	1%	29%	25%	19%	3%	47%	4%	6%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	4	4	0		24	12	2		7	8	2		3	8	0		0	0	0					
	5%	5%	0%	11%	32%	16%	3%	51%	9%	11%	3%	23%	4%	11%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	35	28	3		0	0	0		1	4	1		0	0	0		3	1	0		0	0	0	
	46%	37%	4%	87%	0%	0%	0%	0%	1%	5%	1%	8%	0%	0%	0%	0%	4%	1%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	15	12	1		9	8	2		8	4	0		6	2	1		2	6	0		0	1	0	
	19%	16%	1%	36%	12%	10%	3%	25%	10%	5%	0%	16%	8%	3%	1%	12%	3%	8%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	23	13	1		11	12	3		2	5	0		3	3	0		1	0	0					
	30%	17%	1%	48%	14%	16%	4%	34%	3%	6%	0%	9%	4%	4%	0%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	19	13	1		8	11	3		6	6	0		5	0	0		2	2	0		0	1	0	
	25%	17%	1%	43%	10%	14%	4%	29%	8%	8%	0%	16%	6%	0%	0%	6%	3%	3%	0%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		4	7	0		9	9	0		12	4	2		3	3	0		9	5	1		2	1	0	
	1%	4%	0%	6%	6%	10%	0%	15%	13%	13%	0%	25%	17%	6%	3%	25%	4%	4%	0%	8%	13%	7%	1%	21%	3%	1%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	9	13	0		9	6	1		21	12	3		0	0	0		1	2	0					
	12%	17%	0%	29%	12%	8%	1%	21%	27%	16%	4%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	32	31	2		5	10	0		9	16	0		3	6	0		17	19	2		4	8	0		3	12	0	
	42%	40%	3%	84%	6%	13%	0%	19%	12%	21%	0%	32%	4%	8%	0%	12%	22%	25%	3%	49%	5%	10%	0%	16%	4%	16%	0%	19%

Question 5a) *I have studied curriculum development*

Table 4

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	20	10	6		24	5	12																	
	26%	13%	8%	47%	31%	6%	16%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	7	3	0		14	2	6		16	9	11		7	1	1		0	0	0					
	9%	4%	0%	13%	18%	3%	8%	29%	21%	12%	14%	47%	9%	1%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	5	0	3		27	5	6		7	3	7		2	7	2		0	0	0					
	7%	0%	4%	11%	36%	7%	8%	51%	9%	4%	9%	23%	3%	9%	3%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	36	13	17		0	0	0		5	1	0		0	0	0		2	1	1		0	0	0	
	47%	17%	22%	87%	0%	0%	0%	0%	7%	1%	0%	8%	0%	0%	0%	0%	3%	1%	1%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	17	6	5		12	3	4		7	2	3		6	1	2		2	3	3		0	0	1	
	22%	8%	6%	36%	16%	4%	5%	25%	9%	3%	4%	16%	8%	1%	3%	12%	3%	4%	4%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	24	5	8		14	4	8		2	4	1		3	2	1		1	0	0					
	31%	6%	10%	48%	18%	5%	10%	34%	3%	5%	1%	9%	4%	3%	1%	8%	1%	0%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	19	8	6		10	4	8		9	1	2		4	1	0		1	1	2		1	0	0	
	25%	10%	8%	43%	13%	5%	10%	29%	12%	1%	3%	16%	5%	1%	0%	6%	1%	1%	3%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	3	1	0		4	2	5		7	4	7		11	2	5		4	1	1		10	5	0		3	0	0	
	4%	1%	0%	6%	6%	3%	7%	15%	10%	6%	10%	25%	15%	3%	7%	25%	6%	1%	1%	8%	14%	7%	0%	21%	4%	0%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	10	4	8		8	4	4		25	5	6		0	0	0		1	2	0					
	13%	5%	10%	29%	10%	5%	5%	21%	32%	6%	8%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	37	14	14		8	6	1		14	7	4		5	2	2		21	7	10		6	4	2		8	4	3	
	48%	18%	18%	84%	10%	8%	1%	19%	18%	9%	5%	32%	6%	3%	3%	12%	27%	9%	13%	49%	8%	5%	3%	16%	10%	5%	4%	19%

Question 5b) *The curriculum development course was relevant to educational practice*

Table 5

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	15	18	3		26	12	3																	
	19%	23%	4%	47%	34%	16%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	5	5	0		14	7	1		18	14	4		4	4	1		0	0	0					
	6%	6%	0%	13%	18%	9%	1%	29%	23%	18%	5%	47%	5%	5%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	5	2	1		23	12	3		8	8	1		2	8	1		0	0	0					
	7%	3%	1%	11%	31%	16%	4%	51%	11%	11%	1%	23%	3%	11%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	36	25	5		0	0	0		2	4	0		0	0	0		2	1	1		0	0	0	
	47%	33%	7%	87%	0%	0%	0%	0%	3%	5%	0%	8%	0%	0%	0%	0%	3%	1%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	15	10	3		11	6	2		8	4	0		6	3	0		1	6	1		0	1	0	
	19%	13%	4%	36%	14%	8%	3%	25%	10%	5%	0%	16%	8%	4%	0%	12%	1%	8%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	23	11	3		13	11	2		3	4	0		1	4	1		1	0	0					
	30%	14%	4%	48%	17%	14%	3%	34%	4%	5%	0%	9%	1%	5%	1%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	19	11	3		9	11	2		9	3	0		4	1	0		0	4	0		0	0	1	
	25%	14%	4%	43%	12%	14%	3%	29%	12%	4%	0%	16%	5%	1%	0%	6%	0%	5%	0%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	2	1		4	6	1		9	6	3		11	6	1		4	2	0		8	7	0		3	0	0	
	1%	3%	1%	6%	6%	8%	1%	15%	13%	8%	4%	25%	15%	8%	1%	25%	6%	3%	0%	8%	11%	10%	0%	21%	4%	0%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	10	10	2		8	7	1		22	11	3		0	0	0		1	2	0					
	13%	13%	3%	29%	10%	9%	1%	21%	29%	14%	4%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	32	28	5		7	7	1		13	11	1		5	3	1		19	15	4		6	4	2		6	8	1	
	42%	36%	6%	84%	9%	9%	1%	19%	17%	14%	1%	32%	6%	4%	1%	12%	25%	19%	5%	49%	8%	5%	3%	16%	8%	10%	1%	19%

Question 6a) *I have studied educational research*

Table 6

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	27	5	4		26	6	9																	
	35%	6%	5%	47%	34%	8%	12%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	7	3	0		15	2	5		24	4	8		7	2	0		0	0	0					
	9%	4%	0%	13%	19%	3%	6%	29%	31%	5%	10%	47%	9%	3%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	6	0	2		30	3	5		8	3	6		6	5	0		0	0	0					
	8%	0%	3%	11%	41%	4%	7%	51%	11%	4%	8%	23%	8%	7%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	44	9	13		0	0	0		5	1	0		0	0	0		3	1	0		0	0	0	
	58%	12%	17%	87%	0%	0%	0%	0%	7%	1%	0%	8%	0%	0%	0%	0%	4%	1%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	20	4	4		13	3	3		9	2	1		7	0	2		3	2	3		1	0	0	
	26%	5%	5%	36%	17%	4%	4%	25%	12%	3%	1%	16%	9%	0%	3%	12%	4%	3%	4%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	28	3	6		15	5	6		5	1	1		4	2	0		1	0	0					
	36%	4%	8%	48%	19%	6%	8%	34%	6%	1%	1%	9%	5%	3%	0%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	22	6	5		13	3	6		10	1	1		5	0	0		2	1	1		1	0	0	
	29%	8%	6%	43%	17%	4%	8%	29%	13%	1%	1%	16%	6%	0%	0%	6%	3%	1%	1%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	2	2	0		7	2	2		10	2	6		15	0	3		4	1	1		10	4	1		3	0	0	
	3%	3%	0%	6%	10%	3%	3%	15%	14%	3%	8%	25%	21%	0%	4%	25%	6%	1%	1%	8%	14%	6%	1%	21%	4%	0%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	12	4	6		11	3	2		29	2	5		0	0	0		1	2	0					
	16%	5%	8%	29%	14%	4%	3%	21%	38%	3%	6%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	46	10	9		8	7	0		17	6	2		6	2	1		23	7	8		7	4	1		11	3	1	
	60%	13%	12%	84%	10%	9%	0%	19%	22%	8%	3%	32%	8%	3%	1%	12%	30%	9%	10%	49%	9%	5%	1%	16%	14%	4%	1%	19%

Question 6b) *The educational research course was relevant to educational practice*

Table 7

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	22	12	2		24	13	4																	
	29%	16%	3%	47%	31%	17%	5%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	7	2	1		14	8	0		20	12	4		5	3	1		0	0	0					
	9%	3%	1%	13%	18%	10%	0%	29%	26%	16%	5%	47%	6%	4%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	4	2	2		29	7	2		7	9	1		3	7	1		0	0	0					
	5%	3%	3%	11%	39%	9%	3%	51%	9%	12%	1%	23%	4%	9%	1%	15%	0%	0%	0%	0%				
Current Place of	School				University				HEI				College of Education				School of Education				Other			
Employment	39	21	6		0	0	0		5	1	0		0	0	0		2	2	0		0	0	0	
	51%	28%	8%	87%	0%	0%	0%	0%	7%	1%	0%	8%	0%	0%	0%	0%	3%	3%	0%	5%	0%	0%	0%	0%
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
in Current	17	9	2		13	4	2		6	5	1		8	0	1		2	6	0		0	1	0	
Institution	22%	12%	3%	36%	17%	5%	3%	25%	8%	6%	1%	16%	10%	0%	1%	12%	3%	8%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	25	6	6		14	12	0		4	3	0		3	3	0		0	1	0					
	32%	8%	8%	48%	18%	16%	0%	34%	5%	4%	0%	9%	4%	4%	0%	8%	0%	1%	0%	1%				
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
in Current	21	11	1		13	7	2		6	4	2		5	0	0		1	3	0		0	0	1	
Position	27%	14%	1%	43%	17%	9%	3%	29%	8%	5%	3%	16%	6%	0%	0%	6%	1%	4%	0%	5%	0%	0%	1%	1%
Date Completed	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
TT Course	1	2	1		5	4	2		8	9	1		14	3	1		3	3	0		11	3	1		2	1	0	
	1%	3%	1%	6%	7%	6%	3%	15%	11%	13%	1%	25%	19%	4%	1%	25%	4%	4%	0%	8%	15%	4%	1%	21%	3%	1%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	12	7	3		8	7	1		25	9	2		0	0	0		1	2	0					
	16%	9%	4%	29%	10%	9%	1%	21%	32%	12%	3%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	39	21	5		5	9	1		13	12	0		4	5	0		20	16	2		4	7	1		5	8	2	
	51%	27%	6%	84%	6%	12%	1%	19%	17%	16%	0%	32%	5%	6%	0%	12%	26%	21%	3%	49%	5%	9%	1%	16%	6%	10%	3%	19%

SECTION A - THEORY, RESEARCH AND PRACTICE, PART TWO :

Initial Teacher Training (ITT) - relationship between theory and practice.

(Appendix 7)

This section focuses more specifically on respondents' attitude towards the relationship between theory and practice within the context of ITT. Each table contains combinations of scores in order to illustrate positive and negative responses. This follows the pattern of analysis described in Section A ,part 1.

Question 10: *There should be a relationship between educational theory and practice*

In response to whether there should be a relationship between theory and practice the majority of the respondents were positive in their reply (Table 8). The few exceptions were teachers who had less than 10 years experience. These respondents would have received a more curriculum-based diet in the post ERA (DES, 1988a) stage of teacher training. They would not have received the short-course social science curriculum provided by teacher training colleges during the 1970s and early 1980s.

The length and nature of theoretical courses would appear to have an influence on teachers' perception of the relationship between educational theory and practice. Teachers who have limited or no experience of studying social sciences would have limited or no knowledge of the relationship between educational theory and practice.

Question 11: *The study of educational theory is relevant to ITT courses*

Results illustrate that the study population were consistent in their response to the relationship between educational theory and practice (Table 9). The majority of the respondents agreed that educational theory was relevant to ITT courses. The few

exceptions were, as above, teachers who had less than 10 years experience. It would appear that the period and nature of the study of social sciences were relevant to teachers' understanding of the relationship between educational theory and practice.

Question 12: *Educational theory should be taught before teaching practice but after a period of observation on ITT courses*

The study population (with the exception of 11% who did not know) all agreed with the statement (Table 10). This correlates with the results found in Table 2. The study population believed that educational theory courses are relevant to practice although they had limited experience of such courses (Tables 2-7). The position of educational theory within the context of ITT courses is relevant to the study question. If, as the data has revealed, theoretical study should occur before practice, then respondents have indicated the importance of educational knowledge to practice. Understanding education is, it would appear, a prerequisite to educational practice.

Question 13: *ITT should be school based at secondary schools*

The responses to this question were almost equally divided among each cohort of the study population. While the minority (4%) did not know all other respondents were, with the exception of university lecturers (school of education), equally placed between agreeing and disagreeing with the statement. Table 11 illustrates the dilemma within secondary schools whereby the Government has determined that teachers should be trained in schools (Chapter 3) although not all teachers are in agreement.

There is also an interesting relationship between results found in Table 11 and those found in Tables 8-10. How can educational theory be taught by secondary school

teachers, when as Tables 1-7 reveal, secondary school teachers were not trained in these disciplines? If knowledge is a prerequisite to practice who will impart that knowledge? Will schools extend their practice to the training of teachers by employing teacher educators? Or will schools train student teachers in practice without reference to theory? It would appear that teachers would encourage the implementation of theoretical courses within the ITT curriculum.

Question 14: *The training of teachers should be the same for all student teachers*

Responses to the above statement reveal that each cohort within the study population was divided. Table 12 indicates that amongst school based teachers and middle management there was a slight increase in those who did not know how to respond to the statement (up to 5%). There is, as shown a skew towards a positive response with the exception of middle managers and lecturers. Set in the context of current changes in teacher education these results are not surprising. At a time when the Government is responding to criticism over the NC school based ITT may have been ill-conceived. Responses shown in Tables 11 and 12 reflect the inconsistencies concerning this issue which exist in secondary schools.

Responses to question 14 raise the issue of the relationship between theory and practice within the context of current changes to the ITT curriculum. The inevitable increase in school-based ITT would apparently result in a training programme which would not be the same for all student teachers. The training of student teachers would reflect the training of practising teachers. As this research has shown teachers experiences differ according to socio-political factors.

If school-based ITT was to develop with the exclusion of HEIs, the training of teachers would differ greatly from school to school. The position of a school in relation to ITT is dependent on its staff, with limited expertise ITT courses would be narrow and undemanding. HEI courses offer a standard across many subjects leading to good practice in many schools. This study has shown that teachers value the theoretical element of such courses, would this not be lost if ITT courses were school-based?

Question 15: *ITT courses should include the study of social sciences*

The study population were more of the opinion that ITT courses should include the study of social sciences than not (Table 13). With the exception of the under 30s who had been teaching less than 5 years each cohort was skewed towards a positive response. This does not correlate with earlier findings which indicated that the social sciences were neither studied or believed to be relevant to practice (Table 3). Although, Table 13 does relate to Tables 8, 9 and 10 which focus on the need to study educational theory as part of the ITT curriculum, there would appear to be a dilemma facing the relationship between educational theory and practice.

Teachers and lecturers indicated that educational theory and the social sciences should be included in ITT courses. However their own experience (Table 3) of such courses was not considered to be relevant to educational practice. It would appear that the context of the courses led to a negative response not the principle. If educational theory and the social sciences were taught as relevant areas of study, teachers would benefit from the experience. Knowledge enhances experience, educational theory would therefore enhance educational practice. The relationship exists, it is the practice that is problematic.

Question 16: *ITT courses should include the study of curriculum development*

Table 14 illustrates that within each cohort the majority of the study population agreed that ITT courses should include the study of curriculum development. The contrast between results found in Table 14 and Table 5 is self-evident, when placed in the context of their own training teachers had limited knowledge of curriculum development. Schools, having been thrust by the Government into a period of change were seeking an increase in relevant ITT courses.

Question 17: *The training of teachers should be determined by Higher Education Institutes*

Perhaps as a reflection of their own experiences the study population was less positive in response to the above statement (Table 15). While the majority (two thirds in most cohorts) was in favour of ITT courses being determined by HEIs the result was not overwhelming. The cohort of senior managers did not respond positively (1% for, 8% against). This may reflect the increase in influence on ITT courses that senior management in schools have gained since September 1992. The dilemma remains, who will instruct students in educational theory and the social sciences without the input from HEIs? Although the study population may not be in agreement over the input to ITT courses by HEIs they were in agreement over the need for a theoretical element.

Question 18*: ITT courses should include the study of action research*

The results shown in Table 16 indicate that the majority of the study population agreed that ITT courses should include the study of action research. These differ from the findings of Section A, Part One, where the majority of the respondents believed that educational research was not relevant to educational practice. A possible reason for this

apparent contradiction may be the respondents' understanding of research. Part One findings clearly illustrated that the majority of the study population had not participated in educational research as part of their own training.

This data corresponds with previous tables, where responses which were based on prior experience the results were negative. In contrast where responses were dependent on the respondent's attitude towards what should happen the results were positive. It would appear that the nature of ITT courses has, in the past, led teachers to devalue the relationship between educational theory, research and practice.

Question 19: *All ITT courses should include a detailed evaluation of educational practice*

This question was included to determine whether respondents would agree in principle to the evaluation of practice. Much educational practice, whether in the classroom or beyond, exists without any acknowledgement and subsequent evaluation. However teachers are engaged in evaluation on a daily basis, as teachers prepare lesson plans they are evaluating previous practice. In essence this is action research, researching practice in order to implement change (Chapter 2). Teachers in secondary schools do engage in practices which are at the foundation of action research, yet in practice they do not appear to participate in research. Table 17 illustrates that the majority of the study population agreed that all ITT courses should include a detailed evaluation of educational practice.

Who will provide the knowledge and understanding of educational practice to student teachers? If, as indicated, few teachers have knowledge and experience of research

further training would be required. However if the policy is to focus on educational practice, this will mean the demise of educational theory and research in schools. The results of this study indicate the need to increase research in schools. The neglect of research and research practice in schools will be detrimental to educational practice. Teachers who have limited knowledge of educational theory and research have agreed (in the majority of cases) that theory and research are relevant to practice.

Question 20: *All ITT students should participate in educational research*

The majority of the study population agreed that all ITT students should participate in educational research (Table 18). This correlates with earlier results (Table 16), which indicated that all ITT students should study action research. The respondents, whilst not having participated in educational research during their own career, would not be against the inclusion of research in ITT courses. Table 18 illustrates that, with the exception of the cohort of teachers who have worked for over fifteen years in the same institution, the results were skewed towards the positive. The difference of opinion by established teachers within institutions may reflect their perception and experience of change. Research programmes imply a need for change, working in an institution for over fifteen years implies a need for stability. Further investigation would be required to determine why respondents have replied either positively or negatively to the statements.

Question 21: *The Department For Education should define the content of ITT courses*

Having found that (with the exception of senior managers) the study population would appear to be in agreement that HEIs should determine ITT courses (Table 15), the results shown in Table 19 do not correlate. It would appear that 50% of the study population does not agree that the DFE should determine the content of the ITT

curriculum, whereas 45% do agree. This contrasts with Table 15 where 61% of the study population agreed that HEIs should determine the content of ITT courses. Further analysis reveals that those respondents with education qualifications (Cert.Ed, B.Ed), who attended higher education colleges or schools of education agreed that the DFE should determine the content of the ITT curriculum. This contrasts with graduates who have followed PGCE and M.Ed courses at university departments who disagreed. Middle and senior managers also disagreed whereas teachers agreed that the DFE should determine the content of the ITT curriculum. The role of secondary school middle and senior managers in recent years has changed in respect of ITT which may explain the differences between their cohort and teachers.

The question still remains, who should define/determine the content of ITT courses. A four way battle for influence may emerge between higher education colleges, universities, schools and the Government. The results of this study reveal that the demarcation lines are not clearly defined.

Question 22: *ITT courses should prepare students to teach*

This statement checked that respondents had read the questionnaire. The study population responded in agreement with the statement (Table 20). Only 3 (4%) of the study population indicated that they did not know, as they had not participated in ITT courses. This indicates that the study population was reading the questionnaire.

Question 23: *ITT courses should prepare students to participate in educational research*

The results shown in Table 21 differ from responses shown in Tables 16 and 18 in that there was a greater divide within each cohort between those who agreed or disagreed with the statement. In the earlier tables (Tables 16 and 18) the majority of the study population agreed that ITT courses should include action research and educational research. The divide would appear to be between the cohort which trained in colleges of education (agreed) and the cohort which trained in university departments (disagreed). This is further substantiated by the cohort with educational qualifications (agreed) and the cohort with qualifications prior to entering teaching courses (disagreed). These findings correlate with the differences between the cohorts in response to Question 21 (Table 19). The contrasts may exist as a consequence of the courses followed by practising teachers. The cohorts who followed a broad education course would have engaged in the study of education, social sciences and aspects of educational research, whereas the cohort who trained in a university department may have focused on curriculum matters only. In the context of this study the results indicate that the majority of respondents agreed with the inclusion of research programmes within ITT courses (Tables 16 and 18).The inconsistent results in Table 21 revealed that the study population was divided in its response to whether ITT courses should prepare students to participate in educational research. This may reflect the relationship between research and practice within the context of secondary schools, i.e. it is divided according to experience.

Question 24: *ITT courses should include an introduction to educational theory and its relationship to educational practice*

The study population indicated, in the majority of cases, that they agreed with the above statement. Table 22 illustrates that only a very small minority of the study population disagreed with the above. This contrasts with earlier findings (Tables 1-7) which portray a more negative response to the relationship between educational theory and practice. The results may be interpreted within the context of training. Teachers have, in their responses, implied that a broad-based course which includes theoretical and research elements is required for students of education. Differences exist between the cohort trained at higher education colleges and the cohort trained at university departments. Inevitably, the latter's experience of short courses has led to a more limited view of educational theory and research. In contrast, established practitioners would wish to be included in research programmes or attend theoretical courses. As stated earlier in this analysis; given the current changes who will be responsible for the delivery of educational theory and research programmes for future generations of student teachers?

Question 25: *ITT courses should include the study of educational research documents*

The majority of the study population agreed with the above statement (Table 23). Again this differs from the experiences of the teachers and lecturers participating in this research. The responses in Section A, Part One, revealed that many of the study population had not participated in research programmes as student teachers. In contrast the majority of the study population agreed that the study of educational research documents should be included in ITT courses. This correlates with Tables 16 and 18 which indicated positive responses to the inclusion of the study of research in ITT.

The study population indicated that both educational theory and educational research are relevant to educational practice. The emphasis on the importance of the study of educational theory and research during teacher training supports this view. Two issues emerge from this research;

1) why did social science and educational courses fail in past ITT programmes?
2) why is there an emphasis on educational practice in current ITT courses?

Question 26: *There is a relationship between educational practice and educational research*

Table 24 illustrates that the majority of the study population agreed that there is a relationship between educational practice and educational research. It would appear from the results of this section of the questionnaire that, whilst the majority of the study population agreed in principle that the relationship between theory and practice exists, they find the practical application of theory to teaching in a secondary school a difficult process to comprehend. As a consequence the study of theory and research remains in the realm of the student of education not the practitioner.

If the relationship between educational theory, research and practice is to be of value to education, each disparate discipline should be understood by educationalists. Education will not be studied in pure terms until such time that each discipline works towards a common goal. For example, debates which focus on curriculum issues should involve those experiencing the curriculum at the chalk face. Theory should be based on reality. The reality of secondary education is in the classroom. In order for teachers to succeed as researchers they need to *know how to know*. Knowledge and experience are at the

grassroots of education.

Question 27: *No training is required for teachers*

This statement was included to test the study population. In contrast to the statement contained in question 22 this required a negative response. The results shown in Table 25 indicated that all respondents had read the question. The cohort who disagreed or did not know were mature untrained teachers who had not participated in ITT courses.

CONCLUSIONS - SECTION A, PART TWO

The majority of the study population agreed that there is a relationship between educational theory, research and practice (Table 8). Respondents also agreed that educational theory is relevant to educational practice. These results reflect the inconsistencies in responses throughout this research. In particular the respondents' experiences of educational courses during the 1970s and 1980s were not considered to be relevant to educational practice. The paradox between the experience and beliefs of the respondents is reflected at every stage of this research.

The application of educational theory and research to practice is difficult to define. However respondents agreed that an understanding of education is a prerequisite to practice (Table 10). Where respondents trained appears to have influenced the results of this research. Those who trained in colleges of education had a more positive view of education courses than those who trained in university departments. Education graduates were also more likely to support the training of teachers in colleges of education, in contrast to university graduates who considered that teachers could be trained in schools (Table 11). If knowledge of education is a prerequisite to practice,

who would teach the student teacher in school? School-based ITT may be ill-conceived.

The majority of respondents agreed that curriculum development should be studied by student teachers in preparation for entry into the profession. This is not surprising given the emphasis on curriculum in schools. The study of the social sciences was also considered to be relevant to educational practice. Respondents' experience of such courses had not influenced their opinion.

It can be concluded that the differences in responses appear to reflect the context of the question. When referring to the respondents' experience of educational theory, the results are negative. In contrast, when referring to what should be contained in the ITT curriculum, the results are positive. A further example of this emerging pattern is the study population's response to action research. In Section A, Part One, respondents indicated that they had not participated in educational research or action research. However in Section A, Part Two, respondents agreed that action research should be included on the ITT curriculum. The study population also indicated the need to increase educational research in schools (Table 17), which would lead to further training. The neglect of research and research practices in schools has been detrimental to the development of the relationship between educational theory, research and practice. Within the context of this study, teachers who have a limited knowledge of educational theory and research agreed that theory and research are relevant to practice.

The study population was unclear as to who should determine or define the content of the ITT curriculum. Respondents were divided as to whether HEIs or the Government should determine its content (Tables 15 and 19).

The researcher argues that, at a fundamental level, teachers need to *know how to know.* The reality of secondary education is in the classroom, where teachers are engaged in educational research on a daily basis. The study population agreed that ITT courses should have a theoretical framework, this differs from current developments in ITT. There appears to be a four way battle for influence on ITT between schools, colleges of education, universities and the Government. A more collaborative approach to the development of ITT could lead to an increased understanding of educational theory, research and practice.

Question 10 *There should be a relationship between educational theory and practice*

Table 8:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	1	34	1		0	38	3																	
	1%	44%	1%	47%	0%	49%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	7	2		0	21	1		0	35	1		0	9	0		0	0	0					
	1%	9%	3%	13%	0%	27%	1%	29%	0%	45%	1%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		1	35	2		0	16	1		0	11	0		0	0	0					
	0%	9%	1%	11%	1%	47%	3%	51%	0%	22%	1%	23%	0%	15%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	1	61	4		0	0	0		0	6	0		0	0	0		0	4	0		0	0	0	
	1%	80%	5%	87%	0%	0%	0%	0%	0%	8%	0%	8%	0%	0%	0%	0%	0%	5%	0%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	26	2		1	17	1		0	12	0		0	9	0		0	7	1		0	1	0	
	0%	34%	3%	36%	1%	22%	1%	25%	0%	16%	0%	16%	0%	12%	0%	12%	0%	9%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	1	33	3		0	25	1		0	7	0		0	6	0		0	1	0					
	1%	43%	4%	48%	0%	32%	1%	34%	0%	9%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	31	2		1	20	1		0	12	0		0	5	0		0	3	1		0	1	0	
	0%	40%	3%	43%	1%	26%	1%	29%	0%	16%	0%	16%	0%	6%	0%	6%	0%	4%	1%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	4	0		0	10	1		0	17	1		0	18	0		0	6	0		1	12	2		0	3	0	
	0%	6%	0%	6%	0%	14%	1%	15%	0%	24%	1%	25%	0%	25%	0%	25%	0%	8%	0%	8%	1%	17%	3%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other											
	0	20	2		0	16	0		1	33	2		0	0	0		0	3	0									
	0%	26%	3%	29%	0%	21%	0%	21%	1%	43%	3%	47%	0%	0%	0%	0%	0%	4%	0%	4%								
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	1	61	3		0	14	1		0	24	1		0	8	1		0	36	2		0	12	0		0	15	0	
	1%	79%	4%	84%	0%	18%	1%	19%	0%	31%	1%	32%	0%	10%	1%	12%	0%	47%	3%	49%	0%	16%	0%	16%	0%	19%	0%	19%

Question 11 *The study of educational theory is relevant to ITT courses*

Table 9:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	3	32	1		2	36	3																	
	4%	42%	1%	47%	3%	47%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	2	8	0		3	18	1		0	33	3		0	9	0		0	0	0					
	3%	10%	0%	13%	4%	23%	1%	29%	0%	43%	4%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		5	33	0		0	16	1		0	11	0		0	0	0					
	0%	9%	1%	11%	7%	45%	0%	51%	0%	22%	1%	23%	0%	15%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	5	58	3		0	0	0		0	5	1		0	0	0		0	4	0		0	0	0	
	7%	76%	4%	87%	0%	0%	0%	0%	0%	7%	1%	8%	0%	0%	0%	0%	0%	5%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	26	1		3	15	1		0	12	0		1	7	1		0	7	1		0	1	0	
	1%	34%	1%	36%	4%	19%	1%	25%	0%	16%	0%	16%	1%	9%	1%	12%	0%	9%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	4	31	2		1	23	2		0	7	0		0	6	0		0	1	0					
	5%	40%	3%	48%	1%	30%	3%	34%	0%	9%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	30	1		3	18	1		0	11	1		0	5	0		0	3	1		0	1	0	
	3%	39%	1%	43%	4%	23%	1%	29%	0%	14%	1%	16%	0%	6%	0%	6%	0%	4%	1%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	4	0		0	9	2		0	17	1		1	17	0		1	5	0		3	12	0		0	2	1	
	0%	6%	0%	6%	0%	13%	3%	15%	0%	24%	1%	25%	1%	24%	0%	25%	1%	7%	0%	8%	4%	17%	0%	21%	0%	3%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	20	2		2	14	0		3	32	1		0	0	0		0	2	1					
	0%	26%	3%	29%	3%	18%	0%	21%	4%	42%	1%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	4	59	2		0	13	2		0	23	2		0	7	2		2	33	3		0	11	1		0	14	1	
	5%	77%	3%	84%	0%	17%	3%	19%	0%	30%	3%	32%	0%	9%	3%	12%	3%	43%	4%	49%	0%	14%	1%	16%	0%	18%	1%	19%

Question 12 *Educational theory should be taught before teaching practice but after a period of observation on ITT courses*

Table 10:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	2	29	5		1	36	4																	
	3%	38%	6%	47%	1%	47%	5%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	6	3		1	18	3		1	32	3		0	9	0		0	0	0					
	1%	8%	4%	13%	1%	23%	4%	29%	1%	42%	4%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		1	32	5		0	15	2		1	9	1		0	0	0					
	0%	9%	1%	11%	1%	43%	7%	51%	0%	20%	3%	23%	1%	12%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	1	57	8		0	0	0		1	5	0		0	0	0		1	2	1		0	0	0	
	1%	75%	11%	87%	0%	0%	0%	0%	1%	7%	0%	8%	0%	0%	0%	0%	1%	3%	1%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	25	2		1	13	5		0	12	0		1	7	1		0	7	1		0	1	0	
	1%	32%	3%	36%	1%	17%	6%	25%	0%	16%	0%	16%	1%	9%	1%	12%	0%	9%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	1	29	7		1	23	2		0	7	0		1	5	0		0	1	0					
	1%	38%	9%	48%	1%	30%	3%	34%	0%	9%	0%	9%	1%	6%	0%	8%	0%	1%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	28	4		1	18	3		1	11	0		0	4	1		0	3	1		0	1	0	
	1%	36%	5%	43%	1%	23%	4%	29%	1%	14%	0%	16%	0%	5%	1%	6%	0%	4%	1%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	4	0		1	9	1		0	16	2		0	17	1		1	3	2		1	12	2		0	2	1	
	0%	6%	0%	6%	1%	13%	1%	15%	0%	22%	3%	25%	0%	24%	1%	25%	1%	4%	3%	8%	1%	17%	3%	21%	0%	3%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	19	3		1	14	1		2	29	5		0	0	0		0	3	0					
	0%	25%	4%	29%	1%	18%	1%	21%	3%	38%	6%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	3	54	8		2	11	2		1	22	2		1	6	2		2	33	3		2	9	1		1	12	2	
	4%	70%	10%	84%	3%	14%	3%	19%	1%	29%	3%	32%	1%	8%	3%	12%	3%	43%	4%	49%	3%	12%	1%	16%	1%	16%	3%	19%

Question 13 *ITT should be school based at secondary schools*

Table 11:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	20	16	0		20	18	3																	
	26%	21%	0%	47%	26%	23%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	4	6	0		12	9	1		19	15	2		5	4	0		0	0	0					
	5%	8%	0%	13%	16%	12%	1%	29%	25%	19%	3%	47%	6%	5%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	4	2	2		18	20	0		10	7	0		7	4	0		0	0	0					
	5%	3%	3%	11%	24%	27%	0%	51%	14%	9%	0%	23%	9%	5%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	33	31	2		0	0	0		2	3	1		0	0	0		4	0	0		0	0	0	
	43%	41%	3%	87%	0%	0%	0%	0%	3%	4%	1%	8%	0%	0%	0%	0%	5%	0%	0%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	14	14	0		10	8	1		6	5	1		4	4	1		5	3	0		1	0	0	
	18%	18%	0%	36%	13%	10%	1%	25%	8%	6%	1%	16%	5%	5%	1%	12%	6%	4%	0%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	16	19	2		14	11	1		4	3	0		5	1	0		1	0	0					
	21%	25%	3%	48%	18%	14%	1%	34%	5%	4%	0%	9%	6%	1%	0%	8%	1%	0%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	16	17	0		12	9	1		6	4	2		3	2	0		2	2	0		1	0	0	
	21%	22%	0%	43%	16%	12%	1%	29%	8%	5%	3%	16%	4%	3%	0%	6%	3%	3%	0%	5%	1%	0%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	3	1	0		6	3	2		8	9	1		11	7	0		5	1	0		7	8	0		0	3	0	
	4%	1%	0%	6%	8%	4%	3%	15%	11%	13%	1%	25%	15%	10%	0%	25%	7%	1%	0%	8%	10%	11%	0%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	11	9	2		12	4	0		16	19	1		0	0	0		1	2	0					
	14%	12%	3%	29%	16%	5%	0%	21%	21%	25%	1%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	34	29	2		9	5	1		13	11	1		5	3	1		18	18	2		6	5	1		8	6	1	
	44%	38%	3%	84%	12%	6%	1%	19%	17%	14%	1%	32%	6%	4%	1%	12%	23%	23%	3%	49%	8%	6%	1%	16%	10%	8%	1%	19%

Question 14 *The training of teachers should be the same for all student teachers*

Table 12:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	15	19	2		16	22	3																	
	19%	25%	3%	47%	21%	29%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	2	6	2		12	8	2		14	21	1		3	6	0		0	0	0					
	3%	8%	3%	13%	16%	10%	3%	29%	18%	27%	1%	47%	4%	8%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	5	1		15	21	2		6	10	1		5	5	1		0	0	0					
	3%	7%	1%	11%	20%	28%	3%	51%	8%	14%	1%	23%	7%	7%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	24	38	4		0	0	0		5	1	0		0	0	0		2	1	1		0	0	0	
	32%	50%	5%	87%	0%	0%	0%	0%	7%	1%	0%	8%	0%	0%	0%	0%	3%	1%	1%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	14	1		6	9	4		4	8	0		4	5	0		3	5	0		1	0	0	
	17%	18%	1%	36%	8%	12%	5%	25%	5%	10%	0%	16%	5%	6%	0%	12%	4%	6%	0%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	10	23	4		14	11	1		3	4	0		4	2	0		0	1	0					
	13%	30%	5%	48%	18%	14%	1%	34%	4%	5%	0%	9%	5%	3%	0%	8%	0%	1%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	15	15	3		9	11	2		3	9	0		2	3	0		2	2	0		0	1	0	
	19%	19%	4%	43%	12%	14%	3%	29%	4%	12%	0%	16%	3%	4%	0%	6%	3%	3%	0%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		4	7	0		9	8	1		7	10	1		1	4	1		6	8	1		1	1	1	
	1%	4%	0%	6%	6%	10%	0%	15%	13%	11%	1%	25%	10%	14%	1%	25%	1%	6%	1%	8%	8%	11%	1%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	7	13	2		6	9	1		16	18	2		0	0	0		2	1	0					
	9%	17%	3%	29%	8%	12%	1%	21%	21%	23%	3%	47%	0%	0%	0%	0%	3%	1%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	24	37	4		5	9	1		10	14	1		3	5	1		19	17	2		5	6	1		5	8	2	
	31%	48%	5%	84%	6%	12%	1%	19%	13%	18%	1%	32%	4%	6%	1%	12%	25%	22%	3%	49%	6%	8%	1%	16%	6%	10%	3%	19%

Question 15 *ITT courses should include the study of social sciences*

Table 13:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	12	20	4		12	28	1																	
	16%	26%	5%	47%	16%	36%	1%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	5	4	1		8	11	3		8	27	1		3	6	0		0	0	0					
	6%	5%	1%	13%	10%	14%	4%	29%	10%	35%	1%	47%	4%	8%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	6	1		12	24	2		4	12	1		4	6	1		0	0	0					
	1%	8%	1%	11%	16%	32%	3%	51%	5%	16%	1%	23%	5%	8%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	17	44	5		0	0	0		4	2	0		0	0	0		3	1	0		0	0	0	
	22%	58%	7%	87%	0%	0%	0%	0%	5%	3%	0%	8%	0%	0%	0%	0%	4%	1%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	14	13	1		4	13	2		2	9	1		3	5	1		1	7	0		0	1	0	
	18%	17%	1%	36%	5%	17%	3%	25%	3%	12%	1%	16%	4%	6%	1%	12%	1%	9%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	11	22	4		8	17	1		2	5	0		3	3	0		0	1	0					
	14%	29%	5%	48%	10%	22%	1%	34%	3%	6%	0%	9%	4%	4%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	16	16	1		4	15	3		2	10	0		1	3	1		1	3	0		0	1	0	
	21%	21%	1%	43%	5%	19%	4%	29%	3%	13%	0%	16%	1%	4%	1%	6%	1%	4%	0%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		2	9	0		3	13	2		5	12	1		3	3	0		6	7	2		2	1	0	
	1%	4%	0%	6%	3%	13%	0%	15%	4%	18%	3%	25%	7%	17%	1%	25%	4%	4%	0%	8%	8%	10%	3%	21%	3%	1%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	4	17	1		5	9	2		14	20	2		0	0	0		1	2	0					
	5%	22%	1%	29%	6%	12%	3%	21%	18%	26%	3%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	19	44	2		5	10	0		7	18	0		5	4	0		16	21	1		4	8	0		2	12	1	
	25%	57%	3%	84%	6%	13%	0%	19%	9%	23%	0%	32%	6%	5%	0%	12%	21%	27%	1%	49%	5%	10%	0%	16%	3%	16%	1%	19%

Question 16 *ITT courses should include the study of curriculum development*

Table 14:

1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Male				Female																			
3	29	4		2	37	2																	
4%	38%	5%	47%	3%	48%	3%	53%																
Under 30				Under 40				Under 50				Under 60				Over 60							
0	10	0		1	18	3		4	29	3		0	9	0		0	0	0					
0%	13%	0%	13%	1%	23%	4%	29%	5%	38%	4%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
0	7	1		3	32	3		0	15	2		1	10	0		0	0	0					
0%	9%	1%	11%	4%	43%	4%	51%	0%	20%	3%	23%	1%	14%	0%	15%	0%	0%	0%	0%				
School				University				HEI				College of Education				School of Education				Other			
3	57	6		0	0	0		1	5	0		0	0	0		1	3	0		0	0	0	
4%	75%	8%	87%	0%	0%	0%	0%	1%	7%	0%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
0	27	1		2	15	2		1	10	1		2	5	2		0	8	0		0	1	0	
0%	35%	1%	36%	3%	19%	3%	25%	1%	13%	1%	16%	3%	6%	3%	12%	0%	10%	0%	10%	0%	1%	0%	1%
Teacher				Middle Manager				Senior Manager				Lecturer				Other							
1	32	4		3	21	2		1	6	0		0	6	0		0	1	0					
1%	42%	5%	48%	4%	27%	3%	34%	1%	8%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
1	31	1		1	18	3		2	10	0		1	2	2		0	4	0		0	1	0	
1%	40%	1%	43%	1%	23%	4%	29%	3%	13%	0%	16%	1%	3%	3%	6%	0%	5%	0%	5%	0%	1%	0%	1%
1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
0	4	0		1	10	0		1	15	2		3	12	3		0	5	1		0	15	0		0	3	0	
0%	6%	0%	6%	1%	14%	0%	15%	1%	21%	3%	25%	4%	17%	4%	25%	0%	7%	1%	8%	0%	21%	0%	21%	0%	4%	0%	4%
HEI				School of Education				University Department				Correspondeece Course				Other							
0	20	2		1	14	1		4	29	3		0	0	0		0	3	0					
0%	26%	3%	29%	1%	18%	1%	21%	5%	38%	4%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
4	57	4		2	12	1		4	21	0		2	7	0		3	34	1		2	10	0		1	13	1	
5%	74%	5%	84%	3%	16%	1%	19%	5%	27%	0%	32%	3%	9%	0%	12%	4%	44%	1%	49%	3%	13%	0%	16%	1%	17%	1%	19%

Question 17 *The training of teachers should be determined by Institutes of Higher Education*

Table 15:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	13	20	3		11	27	3																	
	17%	26%	4%	47%	14%	35%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	3	7	0		9	11	2		11	22	3		1	7	1		0	0	0					
	4%	9%	0%	13%	12%	14%	3%	29%	14%	29%	4%	47%	1%	9%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	6	1		12	23	3		5	12	0		5	5	1		0	0	0					
	1%	8%	1%	11%	16%	31%	4%	51%	7%	16%	0%	23%	7%	7%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	22	39	5		0	0	0		1	4	1		0	0	0		1	3	0		0	0	0	
	29%	51%	7%	87%	0%	0%	0%	0%	1%	5%	1%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	10	17	1		5	11	3		4	8	0		3	5	1		2	5	1		0	1	0	
	13%	22%	1%	36%	6%	14%	4%	25%	5%	10%	0%	16%	4%	6%	1%	12%	3%	6%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	9	25	3		8	15	3		6	1	0		1	5	0		0	1	0					
	12%	32%	4%	48%	10%	19%	4%	34%	8%	1%	0%	9%	1%	6%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	15	16	2		5	15	2		2	9	1		1	3	1		1	3	0		0	1	0	
	19%	21%	3%	43%	6%	19%	3%	29%	3%	12%	1%	16%	1%	4%	1%	6%	1%	4%	0%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	2	1		1	9	1		8	8	2		7	10	1		2	4	0		5	9	1		0	3	0	
	1%	3%	1%	6%	1%	13%	1%	15%	11%	11%	3%	25%	10%	14%	1%	25%	3%	6%	0%	8%	7%	13%	1%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	5	15	2		5	10	1		12	21	3		0	0	0		2	1	0					
	6%	19%	3%	29%	6%	13%	1%	21%	16%	27%	4%	47%	0%	0%	0%	0%	3%	1%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	22	39	4		4	8	3		8	14	3		3	4	2		11	23	4		4	6	2		3	10	2	
	29%	51%	5%	84%	5%	10%	4%	19%	10%	18%	4%	32%	4%	5%	3%	12%	14%	30%	5%	49%	5%	8%	3%	16%	4%	13%	3%	19%

Question 18 *ITT courses should include the study of action research*

Table 16:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	7	19	10		2	31	8																	
	9%	25%	13%	47%	3%	40%	10%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	8	1		1	16	5		4	20	12		3	6	0		0	0	0					
	1%	10%	1%	13%	1%	21%	6%	29%	5%	26%	16%	47%	4%	8%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	3	4	1		2	26	10		0	11	6		4	7	0		0	0	0					
	4%	5%	1%	11%	3%	35%	14%	51%	0%	15%	8%	23%	5%	9%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	6	42	18		0	0	0		1	5	0		0	0	0		2	2	0		0	0	0	
	8%	55%	24%	87%	0%	0%	0%	0%	1%	7%	0%	8%	0%	0%	0%	0%	3%	3%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	3	21	4		1	14	4		2	8	2		1	3	5		2	3	3		0	1	0	
	4%	27%	5%	36%	1%	18%	5%	25%	3%	10%	3%	16%	1%	4%	6%	12%	3%	4%	4%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	3	23	11		5	15	6		0	6	1		1	5	0		0	1	0					
	4%	30%	14%	48%	6%	19%	8%	34%	0%	8%	1%	9%	1%	6%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	5	24	4		1	13	8		1	8	3		1	2	2		1	2	1		0	1	0	
	6%	31%	5%	43%	1%	17%	10%	29%	1%	10%	4%	16%	1%	3%	3%	6%	1%	3%	1%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		0	6	5		3	11	4		2	10	6		1	5	0		1	13	1		0	1	2	
	1%	4%	0%	6%	0%	8%	7%	15%	4%	15%	6%	25%	3%	14%	8%	25%	1%	7%	0%	8%	1%	18%	1%	21%	0%	1%	3%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	3	17	2		3	3	10		3	28	5		0	0	0		0	2	1					
	4%	22%	3%	29%	4%	4%	13%	21%	4%	36%	6%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	9	43	13		2	11	2		3	19	3		1	8	0		4	29	5		2	10	0		1	12	2	
	12%	56%	17%	84%	3%	14%	3%	19%	4%	25%	4%	32%	1%	10%	0%	12%	5%	38%	6%	49%	3%	13%	0%	16%	1%	16%	3%	19%

Question 19 *All ITT courses should include a detailed evaluation of educational practice*

Table 17:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	3	31	2		1	38	2																	
	4%	40%	3%	47%	1%	49%	3%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	0	9	1		1	18	3		3	33	0		0	9	0		0	0	0					
	0%	12%	1%	13%	1%	23%	4%	29%	4%	43%	0%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		3	34	1		0	15	2		1	10	0		0	0	0					
	0%	9%	1%	11%	4%	46%	1%	51%	0%	20%	3%	23%	1%	14%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	3	60	3		0	0	0		0	6	0		0	0	0		1	2	1		0	0	0	
	4%	79%	4%	87%	0%	0%	0%	0%	0%	8%	0%	8%	0%	0%	0%	0%	1%	3%	1%	5%	0%	0%	0%	0%
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
In Current	0	26	2		2	16	1		0	11	1		1	8	0		1	7	0		0	1	0	
Institution	0%	34%	3%	36%	3%	21%	1%	25%	0%	14%	1%	16%	1%	10%	0%	12%	1%	9%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	1	34	2		2	23	1		1	6	0		0	5	1		0	1	0					
	1%	44%	3%	48%	3%	30%	1%	34%	1%	8%	0%	9%	0%	6%	1%	8%	0%	1%	0%	1%				
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
In Current	2	30	1		2	18	2		0	11	1		0	5	0		0	4	0		0	1	0	
Position	3%	39%	1%	43%	3%	23%	3%	29%	0%	14%	1%	16%	0%	6%	0%	6%	0%	5%	0%	5%	0%	1%	0%	1%
Date Completed	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
ITT Course	0	4	0		2	9	0		0	17	1		2	15	1		0	5	1		0	15	0		0	2	1	
	0%	6%	0%	6%	3%	13%	0%	15%	0%	24%	1%	25%	3%	21%	1%	25%	0%	7%	1%	8%	0%	21%	0%	21%	0%	3%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	21	1		3	11	2		1	34	1		0	0	0		0	3	0					
	0%	27%	1%	29%	4%	14%	3%	21%	1%	44%	1%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	4	60	1		1	14	0		2	23	0		1	8	0		2	34	2		1	11	0		1	14	0	
	5%	78%	1%	84%	1%	18%	0%	19%	3%	30%	0%	32%	1%	10%	0%	12%	3%	44%	3%	49%	1%	14%	0%	16%	1%	18%	0%	19%

Question 20 *All ITT students should participate in educational research*

Table 18:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	10	19	7		9	28	4																	
	13%	25%	9%	47%	12%	36%	5%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	2	7	1		4	15	3		11	18	7		2	7	0		0	0	0					
	3%	9%	1%	13%	5%	19%	4%	29%	14%	23%	9%	47%	3%	9%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	5	1		11	22	5		2	13	2		3	7	1		0	0	0					
	3%	7%	1%	11%	15%	30%	7%	51%	3%	18%	3%	23%	4%	9%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	16	40	10		0	0	0		2	3	1		0	0	0		1	3	0		0	0	0	
	21%	53%	13%	87%	0%	0%	0%	0%	3%	4%	1%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	9	16	3		2	14	3		2	9	1		3	3	3		3	5	0		0	0	1	
	12%	21%	4%	36%	3%	18%	4%	25%	3%	12%	1%	16%	4%	4%	4%	12%	4%	6%	0%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	9	21	7		7	16	3		2	4	1		1	5	0		0	1	0					
	12%	27%	9%	48%	9%	21%	4%	34%	3%	5%	1%	9%	1%	6%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	12	19	2		1	17	4		2	8	2		2	1	2		2	1	1		0	1	0	
	16%	25%	3%	43%	1%	22%	5%	29%	3%	10%	3%	16%	3%	1%	3%	6%	3%	1%	1%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		2	5	4		5	10	3		5	11	2		0	6	0		4	10	1		1	1	1	
	1%	4%	0%	6%	3%	7%	6%	15%	7%	14%	4%	25%	7%	15%	3%	25%	0%	8%	0%	8%	6%	14%	1%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	4	16	2		5	8	3		9	21	6		0	0	0		1	2	0					
	5%	21%	3%	29%	6%	10%	4%	21%	12%	27%	8%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	16	42	7		2	10	3		6	17	2		2	6	1		8	27	3		2	9	1		1	12	2	
	21%	55%	9%	84%	3%	13%	4%	19%	8%	22%	3%	32%	3%	8%	1%	12%	10%	35%	4%	49%	3%	12%	1%	16%	1%	16%	3%	19%

Question 21 *The Department For Education should define the context of ITT courses*

Table 19:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	19	15	2		19	20	2																	
	25%	19%	3%	47%	25%	26%	3%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	4	4	2		9	11	2		21	15	0		4	5	0		0	0	0					
	5%	5%	3%	13%	12%	14%	3%	29%	27%	19%	0%	47%	5%	6%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	6	1		21	15	2		5	11	1		10	1	0		0	0	0					
	1%	8%	1%	11%	28%	20%	3%	51%	7%	15%	1%	23%	14%	1%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	30	32	4		0	0	0		4	2	0		0	0	0		3	1	0		0	0	0	
	39%	42%	5%	87%	0%	0%	0%	0%	5%	3%	0%	8%	0%	0%	0%	0%	4%	1%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	14	1		8	8	3		4	8	0		8	1	0		4	4	0		1	0	0	
	17%	18%	1%	36%	10%	10%	4%	25%	5%	10%	0%	16%	10%	1%	0%	12%	5%	5%	0%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	14	19	4		15	11	0		4	3	0		4	2	0		1	0	0					
	18%	25%	5%	48%	19%	14%	0%	34%	5%	4%	0%	9%	5%	3%	0%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	17	15	1		9	10	3		4	8	0		5	0	0		3	1	0		0	1	0	
	22%	19%	1%	43%	12%	13%	4%	29%	5%	10%	0%	16%	6%	0%	0%	6%	4%	1%	0%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	2	2	0		8	3	0		9	8	1		7	11	0		4	2	0		6	7	2		1	1	1	
	3%	3%	0%	6%	11%	4%	0%	15%	13%	11%	1%	25%	10%	15%	0%	25%	6%	3%	0%	8%	8%	10%	3%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	6	15	1		6	9	1		24	10	2		0	0	0		2	1	0					
	8%	19%	1%	29%	8%	12%	1%	21%	31%	13%	3%	47%	0%	0%	0%	0%	3%	1%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	33	30	2		13	2	0		17	8	0		6	3	0		21	16	1		9	3	0		10	4	1	
	43%	39%	3%	84%	17%	3%	0%	19%	22%	10%	0%	32%	8%	4%	0%	12%	27%	21%	1%	49%	12%	4%	0%	16%	13%	5%	1%	19%

Question 22 *ITT courses should prepare students to teach*

Table 20:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	0	35	1		0	39	2																	
	0%	45%	1%	47%	0%	51%	3%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	0	10	0		0	21	1		0	34	2		0	9	0		0	0	0					
	0%	13%	0%	13%	0%	27%	1%	29%	0%	44%	3%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		0	37	1		0	16	1		0	11	0		0	0	0					
	0%	9%	1%	11%	0%	50%	1%	51%	0%	22%	1%	23%	0%	15%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	0	63	3		0	0	0		0	6	0		0	0	0		0	4	0		0	0	0	
	0%	83%	4%	87%	0%	0%	0%	0%	0%	8%	0%	8%	0%	0%	0%	0%	0%	5%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	28	0		0	17	2		0	12	0		0	9	0		0	7	1		0	1	0	
	0%	36%	0%	36%	0%	22%	3%	25%	0%	16%	0%	16%	0%	12%	0%	12%	0%	9%	1%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	0	36	1		0	24	2		0	7	0		0	6	0		0	1	0					
	0%	47%	1%	48%	0%	31%	3%	34%	0%	9%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	32	1		0	21	1		0	12	0		0	5	0		0	3	1		0	1	0	
	0%	42%	1%	43%	0%	27%	1%	29%	0%	16%	0%	16%	0%	6%	0%	6%	0%	4%	1%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	4	0		0	10	1		0	17	1		0	18	0		0	6	0		0	14	1		0	3	0	
	0%	6%	0%	6%	0%	14%	1%	15%	0%	24%	1%	25%	0%	25%	0%	25%	0%	8%	0%	8%	0%	19%	1%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	20	2		0	16	0		0	35	1		0	0	0		0	3	0					
	0%	26%	3%	29%	0%	21%	0%	21%	0%	45%	1%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	0	63	2		0	14	1		0	23	2		0	8	1		0	37	1		0	12	0		0	15	0	
	0%	82%	3%	84%	0%	18%	1%	19%	0%	30%	3%	32%	0%	10%	1%	12%	0%	48%	1%	49%	0%	16%	0%	16%	0%	19%	0%	19%

Question 23 *ITT courses should prepare students to participate in educational research*

Table 21:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	17	14	5		16	24	1																	
	22%	18%	6%	47%	21%	31%	1%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	5	4	1		9	12	1		15	17	4		4	5	0		0	0	0					
	6%	5%	1%	13%	12%	16%	1%	29%	19%	22%	5%	47%	5%	6%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	3	4	1		22	14	2		4	11	2		2	8	1		0	0	0					
	4%	5%	1%	11%	30%	19%	3%	51%	5%	15%	3%	23%	3%	11%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	28	32	6		0	0	0		4	2	0		0	0	0		1	3	0		0	0	0	
	37%	42%	8%	87%	0%	0%	0%	0%	5%	3%	0%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	10	16	2		6	12	1		6	6	0		7	0	2		4	4	0		0	0	1	
	13%	21%	3%	36%	8%	16%	1%	25%	8%	8%	0%	16%	9%	0%	3%	12%	5%	5%	0%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	15	18	4		14	10	2		2	5	0		2	4	0		0	1	0					
	19%	23%	5%	48%	18%	13%	3%	34%	3%	6%	0%	9%	3%	5%	0%	8%	0%	1%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	15	17	1		7	13	2		5	7	0		3	0	2		3	0	1		0	1	0	
	19%	22%	1%	43%	9%	17%	3%	29%	6%	9%	0%	16%	4%	0%	3%	6%	4%	0%	1%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		6	4	1		6	10	2		10	6	2		1	5	0		8	7	0		0	2	1	
	1%	4%	0%	6%	8%	6%	1%	15%	8%	14%	3%	25%	14%	8%	3%	25%	1%	7%	0%	8%	11%	10%	0%	21%	0%	3%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	7	14	1		7	9	0		19	12	5		0	0	0		0	3	0					
	9%	18%	1%	29%	9%	12%	0%	21%	25%	16%	6%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	28	32	5		7	6	2		12	12	1		4	5	0		14	23	1		3	9	0		3	11	1	
	36%	42%	6%	84%	9%	8%	3%	19%	16%	16%	1%	32%	5%	6%	0%	12%	18%	30%	1%	49%	4%	12%	0%	16%	4%	14%	1%	19%

Question 24 *ITT courses should include an introduction to educational theory and its relationship to educational practice*

Table 22:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	2	32	2		0	40	1																	
	3%	42%	3%	47%	0%	52%	1%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	9	0		0	20	2		0	35	1		1	8	0		0	0	0					
	1%	12%	0%	13%	0%	26%	3%	29%	0%	45%	1%	47%	1%	10%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		2	36	0		0	16	1		0	10	1		0	0	0					
	0%	9%	1%	11%	3%	49%	0%	51%	0%	22%	1%	23%	0%	14%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	2	62	2		0	0	0		0	6	0		0	0	0		0	3	1		0	0	0	
	3%	82%	3%	87%	0%	0%	0%	0%	0%	8%	0%	8%	0%	0%	0%	0%	0%	4%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	28	0		1	16	2		0	11	1		0	9	0		1	7	0		0	1	0	
	0%	36%	0%	36%	1%	21%	3%	25%	0%	14%	1%	16%	0%	12%	0%	12%	1%	9%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	1	35	1		1	23	2		0	7	0		0	6	0		0	1	0					
	1%	45%	1%	48%	1%	30%	3%	34%	0%	9%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	32	1		1	19	2		0	12	0		0	5	0		1	3	0		0	1	0	
	0%	42%	1%	43%	1%	25%	3%	29%	0%	16%	0%	16%	0%	6%	0%	6%	1%	4%	0%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		0	11	0		0	17	1		0	16	2		0	6	0		1	14	0		0	3	0	
	1%	4%	0%	6%	0%	15%	0%	15%	0%	24%	1%	25%	0%	22%	3%	25%	0%	8%	0%	8%	1%	19%	0%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	21	1		0	14	2		2	34	0		0	0	0		0	3	0					
	0%	27%	1%	29%	0%	18%	3%	21%	3%	44%	0%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	2	62	1		0	14	1		1	23	1		0	8	1		1	35	2		0	11	1		0	15	0	
	3%	81%	1%	84%	0%	18%	1%	19%	1%	30%	1%	32%	0%	10%	1%	12%	1%	45%	3%	49%	0%	14%	1%	16%	0%	19%	0%	19%

Question 25 *ITT Courses should include the study of educational research documents*

Table 23:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	10	24	2		8	30	3																	
	13%	31%	3%	47%	10%	39%	4%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	3	7	0		7	14	1		6	26	4		2	7	0		0	0	0					
	4%	9%	0%	13%	9%	18%	1%	29%	8%	34%	5%	47%	3%	9%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		13	22	3		4	12	1		1	10	0		0	0	0					
	0%	9%	1%	11%	18%	30%	4%	51%	5%	16%	1%	23%	1%	14%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	16	45	5		0	0	0		1	5	0		0	0	0		1	3	0		0	0	0	
	21%	59%	7%	87%	0%	0%	0%	0%	1%	7%	0%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	4	22	2		6	12	1		3	9	0		3	4	2		2	6	0		0	1	0	
	5%	29%	3%	36%	8%	16%	1%	25%	4%	12%	0%	16%	4%	5%	3%	12%	3%	8%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	10	23	4		7	18	1		1	6	0		0	6	0		0	1	0					
	13%	30%	5%	48%	9%	23%	1%	34%	1%	8%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	7	25	1		7	13	2		1	10	1		1	3	1		2	2	0		0	1	0	
	9%	32%	1%	43%	9%	17%	3%	29%	1%	13%	1%	16%	1%	4%	1%	6%	3%	3%	0%	5%	0%	1%	0%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	3	0		1	9	1		1	15	2		7	9	2		1	5	0		5	10	0		1	2	0	
	1%	4%	0%	6%	1%	13%	1%	15%	1%	21%	3%	25%	10%	13%	3%	25%	1%	7%	0%	8%	7%	14%	0%	21%	1%	3%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	1	19	2		6	9	1		11	23	2		0	0	0		0	3	0					
	1%	25%	3%	29%	8%	12%	1%	21%	14%	30%	3%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	13	49	3		4	10	1		4	21	0		1	8	0		6	30	2		2	10	0		2	13	0	
	17%	64%	4%	84%	5%	13%	1%	19%	5%	27%	0%	32%	1%	10%	0%	12%	8%	39%	3%	49%	3%	13%	0%	16%	3%	17%	0%	19%

Question 26 *There is a relationship between educational practice and educational research.*

Table 24:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	2	32	2		1	36	4																	
	3%	42%	3%	47%	1%	47%	5%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	9	0		2	17	3		0	33	3		0	9	0		0	0	0					
	1%	12%	0%	13%	3%	22%	4%	29%	0%	43%	4%	47%	0%	12%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	7	1		3	31	4		0	17	0		0	10	1		0	0	0					
	0%	9%	1%	11%	4%	42%	5%	51%	0%	23%	0%	23%	0%	14%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	3	58	5		0	0	0		0	6	0		0	0	0		0	3	1		0	0	0	
	4%	76%	7%	87%	0%	0%	0%	0%	0%	8%	0%	8%	0%	0%	0%	0%	0%	4%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	27	1		1	14	4		0	11	1		2	7	0		0	8	0		0	1	0	
	0%	35%	1%	36%	1%	18%	5%	25%	0%	14%	1%	16%	3%	9%	0%	12%	0%	10%	0%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	2	31	4		1	23	2		0	7	0		0	6	0		0	1	0					
	3%	40%	5%	48%	1%	30%	3%	34%	0%	9%	0%	9%	0%	8%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	29	3		1	18	3		1	11	0		0	5	0		0	4	0		0	1	0	
	1%	38%	4%	43%	1%	23%	4%	29%	1%	14%	0%	16%	0%	6%	0%	6%	0%	5%	0%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	4	0		0	10	1		0	16	2		2	15	1		0	6	0		1	12	2		0	3	0	
	0%	6%	0%	6%	0%	14%	1%	15%	0%	22%	3%	25%	3%	21%	1%	25%	0%	8%	0%	8%	1%	17%	3%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	21	1		1	12	3		2	32	2		0	0	0		0	3	0					
	0%	27%	1%	29%	1%	16%	4%	21%	3%	42%	3%	47%	0%	0%	0%	0%	0%	4%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	3	59	3		0	13	2		0	23	2		0	8	1		0	35	3		0	11	1		0	15	0	
	4%	77%	4%	84%	0%	17%	3%	19%	0%	30%	3%	32%	0%	10%	1%	12%	0%	45%	4%	49%	0%	14%	1%	16%	0%	19%	0%	19%

Question 27 *No training is required for teachers*

Table 25:

Attributes	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total	1&2	3&4	5	Total
Gender	Male				Female																			
	35	1	0		39	1	1																	
	45%	1%	0%	47%	51%	1%	1%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	10	0	0		21	0	1		35	1	0		8	1	0		0	0	0					
	13%	0%	0%	13%	27%	0%	1%	29%	45%	1%	0%	47%	10%	1%	0%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	7	0	1		38	0	0		17	0	0		10	1	0		0	0	0					
	9%	0%	1%	11%	51%	0%	0%	51%	23%	0%	0%	23%	14%	1%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	63	2	1		0	0	0		6	0	0		0	0	0		4	0	0		0	0	0	
	83%	3%	1%	87%	0%	0%	0%	0%	8%	0%	0%	8%	0%	0%	0%	0%	5%	0%	0%	5%	0%	0%	0%	0%
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
In Current	27	1	0		18	0	1		12	0	0		9	0	0		7	1	0		1	0	0	
Institution	35%	1%	0%	36%	23%	0%	1%	25%	16%	0%	0%	16%	12%	0%	0%	12%	9%	1%	0%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	35	1	1		26	0	0		6	1	0		6	0	0		1	0	0					
	45%	1%	1%	48%	34%	0%	0%	34%	8%	1%	0%	9%	8%	0%	0%	8%	1%	0%	0%	1%				
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
In Current	32	1	0		21	0	1		11	1	0		5	0	0		4	0	0		1	0	0	
Position	42%	1%	0%	43%	27%	0%	1%	29%	14%	1%	0%	16%	6%	0%	0%	6%	5%	0%	0%	5%	1%	0%	0%	1%
Date Completed	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
ITT Course	3	1	0		11	0	0		17	0	1		18	0	0		6	0	0		15	0	0		2	1	0	
	4%	1%	0%	6%	15%	0%	0%	15%	24%	0%	1%	25%	25%	0%	0%	25%	8%	0%	0%	8%	21%	0%	0%	21%	3%	1%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	21	0	1		16	0	0		36	0	0		0	0	0		1	2	0					
	27%	0%	1%	29%	21%	0%	0%	21%	47%	0%	0%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	64	1	0		15	0	0		25	0	0		9	0	0		36	1	1		12	0	0		15	0	0	
	83%	1%	0%	84%	19%	0%	0%	19%	32%	0%	0%	32%	12%	0%	0%	12%	47%	1%	1%	49%	16%	0%	0%	16%	19%	0%	0%	19%

SECTION B - VIEWS ON EDUCATIONAL ISSUES (Appendix 8)

This section examines the beliefs of the study population, measuring their responses towards statements on education. The bi-polar scale is divided into 5 columns from strongly disagree to strongly agree. This follows a similar pattern to Section A in that the more positive responses are to the right of the grid and the negative to the left. The grid differs from Section A as the do not know column has been removed. The analysis of each table involves the combining of scores from columns 1 and 2 - strongly disagree/disagree, and the combining of scores from columns 4 and 5 - agree/strongly agree. Column 3 stands alone as the central column representing an indifferent response whereby the respondent neither disagrees or agrees. Questions 2, 3, 8 and 9 each contain two statements a) and b), this enables the study population to consider an issue from opposing perspectives. This process also enables the researcher to establish the reliability of the data through the analysis of the responses to the a) and b) components of these questions. Respondents were required to indicate which of the statements they agreed with, either a) or b). Columns 1 and 2 represent a), columns 4 and 5 b), column 3 indicates neither agreement or disagreement with either.

Question 1: *The Government has initiated a series of changes which will have a long term detrimental effect on those participating in the educational process as managers, providers or consumers*

The majority of the study population agreed with the above statement (Table 26). The responses were skewed in the majority of cases towards columns 4 and 5. However there was also a significant number of respondents (38%) who neither agreed or disagreed. This cohort was predominantly in the 1986-1990, recently qualified teachers and middle management cells. In response to the above there were similar responses

from university graduates and higher education graduates. This differs from the findings in Section A where Tables 15 and 19 indicated there was little agreement between these two cohorts of the study population as to whether HEIs or the Government should determine/define the content of ITT courses. Knowledge and experience of Government initiatives have led respondents to the belief that recent Government led changes have had a detrimental effect on all concerned. In contrast, university graduates would not have the knowledge and experience to determine whether HEIs could define the content of ITT courses. The question still remains; if, as these results imply, the Government has initiated changes which will have a long term detrimental effect on those involved, why would respondents agree that the Government should determine the content of ITT courses?

Question 2: *a)Educational theorists sit in 'ivory towers' without any contact with 'real' people*

b)Educational theorists determine policies relevant to education in practice

The results shown illustrate a relatively equal division of responses to each statement (Table 27). There is a slight skew towards column 3 in most cohorts. Teachers were found to be more inclined to believe that educational theorists sat in 'ivory towers' than were lecturers. This may correlate with the findings of Section A, where there was an indication that the relationship between theory and practice was problematic in 'real' terms. The results may also reflect a lack of understanding by teachers as to the function of educational theorists in education. Although this research has found that the majority of the study population agreed that a relationship between educational theory, research and practice does exist. The emerging issue is how?

Question 3: *a) Only teachers in schools can train teachers for schools*

b) Teacher educators are required for the training of teachers

The results of Section A revealed that the place for ITT remained unclear. However the majority of the study population's response to the above indicate that teacher educators are required for the training of teachers (Table 28). There were exceptions, a minority of school based teachers (12%) believed that only teachers in schools can train teachers for schools. A minority of university graduates (8%) were also inclined to believe this statement. Within the context of this study the need for teacher educators to participate in the training of teachers is implied. The inclusion of educational theory, research programmes and, the social sciences in ITT courses requires experts in the field. Traditionally the experts have been teacher educators. Perhaps researchers and theorists should also participate in the education of teachers, i.e. become practitioners? A more collaborative approach involving teachers, teacher educators, theorists and researchers would enhance the status of ITT courses and the study of education. Collaboration may also lead to research which is perceived by all to be relevant to practice.

Question 4: *a) Understanding educational theory is a prerequisite to good practice*

b) Understanding educational theory is not relevant to good practice

Throughout this research results have indicated that the majority of the study population agreed that educational theory should be included in the ITT curriculum. Responses to the above statements correlate with earlier findings (Table 29), the exception being within the cohort of school-based teachers, where 20% agree with statement b), thus implying that educational theory is not relevant to good practice. The minority who had not related theory to practice appeared to emerge from graduates trained in university departments. Their response to Question 4 further illustrates the distinctive attitudes

concerning educational theory and research emanating from education graduates and university graduates. Over a third of the study population who gained PGCEs from university departments did not agree that understanding educational theory is a prerequisite to good practice. The results may also illustrate that the more positive perception of the relationship between theory and practice held by the cohort trained in colleges of education reflects the benefits of a broader based course. In determining the content of ITT courses this finding may assist in encouraging collaboration between schools, colleges of education and universities.

Question 5: *Teachers participate in educational research upon entering the classroom*

The majority of the study population agreed with the above statement (Table 30). However there was also a significant minority amongst university graduates (10%) who disagreed with the statement. More interestingly the lecturer cohort was evenly distributed between agreeing and disagreeing with the statement. Amongst the teachers who disagreed (14%), most had been teaching for less than 5 years (10%). A possible explanation for the above may lie in the nature of experience in training and in practice. As a teacher becomes more adept at preparing lessons the use of research techniques as a tool which supports practice becomes more apparent. The process of evaluating failures and successes is the essence of planning. The training of teachers over a long course enables students to be informed of basic research techniques which influence practice. Shorter courses i.e. PGCE have, as shown, tended to focus on the school curriculum. This leads again to the notion of more collaborative practices which would lead to relevant research.

Question 6: *Teachers do not have time to participate in educational research*

Having agreed with the statement, teachers participate in educational research upon entering the classroom, Table 31 indicates results skewed towards agreement with the above. This may reflect difficulties in defining research and an understanding of the process. If, as the results illustrate, teachers do not have time to participate in educational research this could prove problematic in the process of collaboration between practitioners and researchers.

However within several cohorts there was a more even distribution of responses. Middle (12%) and senior managers (4%) in schools appear to have disagreed with the statement. The majority of the cohort of teachers and lecturers (13%) who have been in post for 5-9 years also disagreed with the statement. These findings may reflect a difference of interpretation, in that research of practitioner's own practice may be perceived differently to educational research. The positions of senior and middle managers have, as a result of change, developed and incorporated areas of research as points of reference for the management of schools. In addition, a proportion of teachers have embarked on further study to masters and doctorate level which inevitably includes research. Those respondents with masters qualifications did not agree with the statement (14%). If, as the research indicates, an increasing number of teachers are engaging in further study a direct consequence may be an increased understanding of the relationship between theory, research and practice. This supports the view that the need to *know how to know* is essential to educational practice. Experience and knowledge of educational theory and research have led post-graduate education students, middle and senior managers to understand the importance of giving time to research in educational practice. Further collaboration between educational researchers and practitioners would enhance both

practice and research.

Question 7: *Educational researchers tend to be non-practitioners*

As further evidence of the disparity which exists between teachers as researchers and educational researchers the majority of the study population agreed with the above (Table 32). The results were skewed towards a positive response in agreement with the view that educational researchers are non-practitioners. In practice university researchers may have limited school-based experience, this response reflects the division between school and university based research. The result also indicates the study population's difficulty in defining the concept of research. Within the context of this study educational research has a broad definition that has 'borrowed' scientific terms from the natural and social sciences, each has added academic rigour to research practices. However, this has led to misinterpretations which have isolated researchers from practitioners. Of the school cohort; 87%, 13% disagreed with the statement. The main observation arising from this table is that educational research is perceived as a disparate discipline to teacher research by the majority of the study population.

As the previous table (Table 31) indicated, those engaged in research practices, i.e. middle/senior managers and students of education, interpreted educational research within the context of practitioner research. The position of educational research in relation to educational practice is therefore dependent on the relationship of practitioners to research, and researchers to practice. If a researcher is a practitioner, or a practitioner a researcher, the problem is resolved. Or is it? This would be dependent on the nature of the research.

Practitioner research requires knowledge and experience of research methodology beyond the classroom. This issue is debated in Chapter 2 of this dissertation. Although educational research exists as a disparate discipline to educational practice, this does not preclude a teacher becoming a researcher nor a researcher becoming a teacher.

Question 8: *a) Research methods in education are firmly rooted in scientific practice*

b) Research methods in education are firmly rooted in educational practice

The majority of the study population's response to the above is found in column 3 (Table 33). This indicates that respondents neither agreed or disagreed with each statement. This reflects the findings of Tables 30-32 which revealed the study population's limited understanding of educational research. It appears from these responses that further collaboration between university departments and schools would, at least, involve an increased understanding of each institution's practices. The salient issue is that teachers in schools perceived educational research as removed from classroom practice. Education consists of disparate disciplines which require increased communication and understanding. The response of the study population did not provide an insight as to the individuals' perception of educational research within the context of scientific or educational practice. Thus, the results revealed limited understanding of the premise on which educational research is built.

Question 9: *a)Educational theory is aimed at organising and explaining specific aspects of the educational environment*

b)Educational theory is a series of generalisations by which we attempt to explain some phenomena in a systematic manner

As with the previous statement (Table 33), the majority of respondents from each cohort selected column 3 (Table 34). Where responses differed the results were skewed towards b). The cohort of teachers/lecturers trained between 1961 and 1980 tended to agree with statement b), whereas all others were undecided. Therefore the cohort of teachers/lecturers aged above 40 were more likely to agree with statement b). Perhaps there is a clear division of age, as the experiences of the mature teacher/lecturer led to differing opinions in respect to their understanding of educational theory. This correlates with findings from Section A, which indicated that those trained between 1960 and 1970 were more likely to have studied educational theory and the social sciences.

The results reveal a limited understanding of the place of educational theory in education, which is not dissimilar to earlier findings concerning research. The majority of the study population revealed their limited understanding of research and theoretical terminology. These results indicate the need to include a study of educational theory and social sciences in the ITT curriculum as found in the previous section of this research.

Question 10: a) *Educational research is an extension of knowledge*

b) Educational research is a fraud

Although earlier findings indicated the study population's limited understanding of research, the majority of responses were skewed towards agreement with statement a) (Table 35). It would appear that only a minority of practising teachers/lecturers believe educational research is a fraud (12%). While Table 35 illustrates that responses were skewed towards statement a) there was, in most cohorts, a significant number of respondents in column 3. This would substantiate the view that many teachers would not have had experience of educational research. Without experience and/or knowledge of the issue it would be difficult to formulate an opinion.

Where differences exist, they follow the earlier pattern of disparity between those respondents trained in colleges of education and university graduates. For example, where the college of education graduates agreed (21%) with statement a), a significant number of university graduates were undecided (18%). In addition teachers trained since 1986 were also undecided. These results may reflect the disparate nature of ITT courses. Shorter courses include proportionally less study of research and theory when compared to longer courses. The focus of PGCE has always been to practice teaching where longer courses have traditionally included the study of education. If research is to be understood by practising teachers further study is required. Whilst it is axiomatic that the study of education may not increase a practitioner's ability to teach, it may increase an understanding of their art.

CONCLUSIONS - SECTION B

Respondents had earlier indicated that both the Government and HEIs should determine the content of the ITT curriculum, Section A, part 2. In response to Section B respondents considered that the Government had initiated changes which were detrimental to educational practice (Table 26). The apparent confusion reflects the dilemma faced by teachers in schools; should teachers train student teachers? Further analysis reveals that the majority of the study population did not have an understanding of educational theory and research, yet they had agreed that educational courses should be studied by student teachers. If educational theory and research are relevant to the ITT curriculum, who would deliver the required courses in schools? How would educational theory and research be applied to practice without the guidance from teacher educators?

Although there was agreement among the study population that educational theory and research are relevant to practice, respondents were unclear as to how courses should be delivered within the ITT curriculum. A more collaborative approach to ITT would seemingly enhance practice, the key issue is how can this occur? (Tables 28 and 29)

Collaboration may also lead to research which is relevant to practice. Respondents were divided in their response to research issues. Education graduates appeared to have a broader understanding of educational research issues compared with university graduates (Tables 30, 31 and 32). However the majority of the study population agreed that teachers should participate in educational research. The study population agreed that educational researchers tend to be non-practitioners. Respondents also agreed that research by teachers would be more relevant to practice than research by researchers.

Interestingly, the study population appeared to have difficulty with defining educational research (Table 33). There was limited understanding among the study population of the nature of research and where research actually occurs. Collaboration between educational researchers and practitioners would increase an understanding of educational research and practice.

The majority of the study population agreed that educational research is an extension of knowledge. Education graduates were more decisive in their responses to educational issues than university graduates (Table 35), these results correlate with earlier findings. The study population agreed that educational research should be school-based although respondents were unsure as to whether educational research would benefit educational practice.

The results indicate that an understanding of educational theory and research is a prerequisite to practice. Results also indicate that research contributes to knowledge of education and should be included within the ITT curriculum.

Question 1 *The Government has initiated a series of changes which will have a long term detrimental effect of those participating in the educational process as managers, providers or consumers.*

Table 26:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	6	10	20		4	9	28																	
	8%	13%	26%	47%	5%	12%	36%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	2	5	3		2	6	14		3	7	26		3	1	5		0	0	0					
	3%	6%	4%	13%	3%	8%	18%	29%	4%	9%	34%	47%	4%	1%	6%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	2	4		4	7	27		3	6	8		1	3	7		0	0	0					
	3%	3%	5%	11%	5%	9%	36%	51%	4%	8%	11%	23%	1%	4%	9%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	8	18	40		0	0	0		1	0	5		0	0	0		1	1	2		0	0	0	
	11%	24%	53%	87%	0%	0%	0%	0%	1%	0%	7%	8%	0%	0%	0%	0%	1%	1%	3%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	3	8	17		2	5	12		4	3	5		0	1	8		1	2	5		0	0	1	
	4%	10%	22%	36%	3%	6%	16%	25%	5%	4%	6%	16%	0%	1%	10%	12%	1%	3%	6%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	6	9	22		3	9	14		0	1	6		1	0	5		0	0	1					
	8%	12%	29%	48%	4%	12%	18%	34%	0%	1%	8%	9%	1%	0%	6%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	12	19		5	3	14		2	2	8		0	0	5		1	2	1		0	0	1	
	3%	16%	25%	43%	6%	4%	18%	29%	3%	3%	10%	16%	0%	0%	6%	6%	1%	3%	1%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	1	2		0	3	8		3	2	13		2	5	11		0	0	6		3	7	5		0	1	2	
	1%	1%	3%	6%	0%	4%	11%	15%	4%	3%	18%	25%	3%	7%	15%	25%	0%	0%	8%	8%	4%	10%	7%	21%	0%	1%	3%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	4	8	10		3	3	10		3	8	25		0	0	0		0	0	3					
	5%	10%	13%	29%	4%	4%	13%	21%	4%	10%	32%	47%	0%	0%	0%	0%	0%	0%	4%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	8	15	42		1	4	10		2	5	18		1	3	5		5	7	26		1	2	9		1	4	10	
	10%	19%	55%	84%	1%	5%	13%	19%	3%	6%	23%	32%	1%	4%	6%	12%	6%	9%	34%	49%	1%	3%	12%	16%	1%	5%	13%	19%

Question 2 *a)* *Educational theorists 'sit in ivory towers' without any contact with 'real' people.*

b) *Educational theorists determine policies relevant to education in practice.*

Table 27:

	(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)	
Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	10	15	11		15	14	12																	
	13%	19%	14%	47%	19%	18%	16%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	6	2	2		5	12	5		12	10	14		2	5	2		0	0	0					
	8%	3%	3%	13%	6%	16%	6%	29%	16%	13%	18%	47%	3%	6%	3%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	3	4	1		13	14	11		6	6	5		2	4	5		0	0	0					
	4%	5%	1%	11%	18%	19%	15%	51%	8%	8%	7%	23%	3%	5%	7%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	23	26	17		0	0	0		0	2	4		0	0	0		1	1	2		0	0	0	
	30%	34%	22%	87%	0%	0%	0%	0%	0%	3%	5%	8%	0%	0%	0%	0%	1%	1%	3%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	9	10	9		10	2	7		2	10	0		2	3	4		2	3	3		0	1	0	
	12%	13%	12%	36%	13%	3%	9%	25%	3%	13%	0%	16%	3%	4%	5%	12%	3%	4%	4%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	16	14	7		7	12	7		1	1	5		0	2	4		1	0	0					
	21%	18%	9%	48%	9%	16%	9%	34%	1%	1%	6%	9%	0%	3%	5%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	12	8		7	7	8		2	5	5		1	2	2		1	3	0		1	0	0	
	17%	16%	10%	43%	9%	9%	10%	29%	3%	6%	6%	16%	1%	3%	3%	6%	1%	4%	0%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	2	1	1		2	5	4		4	5	9		6	8	4		3	2	1		7	6	2		1	1	1	
	3%	1%	1%	6%	3%	7%	6%	15%	6%	7%	13%	25%	8%	11%	6%	25%	4%	3%	1%	8%	10%	8%	3%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	7	9	6		4	6	6		13	13	10		0	0	0		1	1	1					
	9%	12%	8%	29%	5%	8%	8%	21%	17%	17%	13%	47%	0%	0%	0%	0%	1%	1%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	22	25	18		5	7	3		6	11	8		3	2	4		11	15	12		5	3	4		5	5	5	
	29%	32%	23%	84%	6%	9%	4%	19%	8%	14%	10%	32%	4%	3%	5%	12%	14%	19%	16%	49%	6%	4%	5%	16%	6%	6%	6%	19%

Question 3 *a)* *Only teachers in schools can train teachers for schools.*

b) *Teacher educators are required for the training of teachers.*

Table 28:

	(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)	
Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	6	8	22		3	10	28																	
	8%	10%	29%	47%	4%	13%	36%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	3	4	3		2	3	17		2	8	26		2	3	4		0	0	0					
	4%	5%	4%	13%	3%	4%	22%	29%	3%	10%	34%	47%	3%	4%	5%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	2	5		5	9	24		2	5	10		1	2	8		0	0	0					
	1%	3%	7%	11%	7%	12%	32%	51%	3%	7%	14%	23%	1%	3%	11%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	9	17	40		0	0	0		0	1	5		0	0	0		0	0	4		0	0	0	
	12%	22%	53%	87%	0%	0%	0%	0%	0%	1%	7%	8%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	6	20		3	5	11		2	3	7		1	2	6		1	2	5		0	0	1	
	3%	8%	26%	36%	4%	6%	14%	25%	3%	4%	9%	16%	1%	3%	8%	12%	1%	3%	6%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	5	13	19		3	5	18		1	0	6		0	0	6		0	0	1					
	6%	17%	25%	48%	4%	6%	23%	34%	1%	0%	8%	9%	0%	0%	8%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	3	9	21		4	4	14		0	4	8		1	0	4		1	1	2		0	0	1	
	4%	12%	27%	43%	5%	5%	18%	29%	0%	5%	10%	16%	1%	0%	5%	6%	1%	1%	3%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	1	2		1	2	8		2	2	14		2	6	10		0	1	5		2	5	8		1	0	2	
	1%	1%	3%	6%	1%	3%	11%	15%	3%	3%	19%	25%	3%	8%	14%	25%	0%	1%	7%	8%	3%	7%	11%	21%	1%	0%	3%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	1	7	14		1	3	12		6	8	22		0	0	0		1	0	2					
	1%	9%	18%	29%	1%	4%	16%	21%	8%	10%	29%	47%	0%	0%	0%	0%	1%	0%	3%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	7	18	40		2	1	12		3	3	19		0	1	8		5	5	28		2	1	9		1	5	9	
	9%	23%	52%	84%	3%	1%	16%	19%	4%	4%	25%	32%	0%	1%	10%	12%	6%	6%	36%	49%	3%	1%	12%	16%	1%	6%	12%	19%

Question 4 *a) Understanding educational theory is a prerequisite to good practice.*

b) Understanding educational theory is not relevant to good practice.

Table 29:

	(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)	
Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	15	13	8		23	10	8																	
	19%	17%	10%	47%	30%	13%	10%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	4	4	2		12	4	6		15	15	6		7	0	2		0	0	0					
	5%	5%	3%	13%	16%	5%	8%	29%	19%	19%	8%	47%	9%	0%	3%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	5	0	3		15	14	9		10	4	3		7	4	0		0	0	0					
	7%	0%	4%	11%	20%	19%	12%	51%	14%	5%	4%	23%	9%	5%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	31	20	15		0	0	0		5	0	1		0	0	0		1	3	0		0	0	0	
	41%	26%	20%	87%	0%	0%	0%	0%	7%	0%	1%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	10	5		10	5	4		6	3	3		5	2	2		3	3	2		1	0	0	
	17%	13%	6%	36%	13%	6%	5%	25%	8%	4%	4%	16%	6%	3%	3%	12%	4%	4%	3%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	15	12	10		15	6	5		3	3	1		4	2	0		1	0	0					
	19%	16%	13%	48%	19%	8%	6%	34%	4%	4%	1%	9%	5%	3%	0%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	17	10	6		11	7	4		6	2	4		1	3	1		2	1	1		1	0	0	
	22%	13%	8%	43%	14%	9%	5%	29%	8%	3%	5%	16%	1%	4%	1%	6%	3%	1%	1%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	3	0	1		7	4	0		6	7	5		10	4	4		4	1	1		6	6	3		1	1	1	
	4%	0%	1%	6%	10%	6%	0%	15%	8%	10%	7%	25%	14%	6%	6%	25%	6%	1%	1%	8%	8%	8%	4%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	15	2	5		7	8	1		15	12	9		0	0	0		1	1	1					
	19%	3%	6%	28%	9%	10%	1%	21%	19%	16%	12%	47%	0%	0%	0%	0%	1%	1%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	33	20	12		9	6	0		15	6	4		6	2	1		20	9	9		6	5	1		9	5	1	
	43%	26%	16%	84%	12%	8%	0%	19%	19%	8%	5%	32%	8%	3%	1%	12%	26%	12%	12%	49%	8%	6%	1%	16%	12%	6%	1%	19%

Question 5 *Teachers participate in educational research upon entering the classroom.*

Table 30:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	9	6	21		5	14	22																	
	12%	8%	27%	47%	6%	18%	29%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	3	1	6		4	7	11		5	8	23		2	4	3		0	0	0					
	4%	1%	8%	13%	5%	9%	14%	29%	6%	10%	30%	47%	3%	5%	4%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	4	4		8	10	20		3	2	12		3	4	4		0	0	0					
	0%	5%	5%	11%	11%	14%	27%	51%	4%	3%	16%	23%	4%	5%	5%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	11	17	38		0	0	0		2	1	3		0	0	0		1	2	1		0	0	0	
	14%	22%	50%	87%	0%	0%	0%	0%	3%	1%	4%	8%	0%	0%	0%	0%	1%	3%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	7	6	15		3	8	8		0	4	8		2	1	6		2	1	5		0	0	1	
	9%	8%	19%	36%	4%	10%	10%	25%	0%	5%	10%	16%	3%	1%	8%	12%	3%	1%	6%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	5	12	20		5	6	15		1	1	5		3	1	2		0	0	1					
	6%	16%	26%	48%	6%	8%	19%	34%	1%	1%	6%	9%	4%	1%	3%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	8	7	18		2	8	12		1	4	7		2	0	3		1	1	2		0	0	1	
	10%	9%	23%	43%	3%	10%	16%	29%	1%	5%	9%	16%	3%	0%	4%	6%	1%	1%	3%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	2	1		3	3	5		1	5	12		3	4	11		1	2	3		5	3	7		0	0	3	
	1%	3%	1%	6%	4%	4%	7%	15%	1%	7%	17%	25%	4%	6%	15%	25%	1%	3%	4%	8%	7%	4%	10%	21%	0%	0%	4%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	1	9	12		4	5	7		8	5	23		0	0	0		1	1	1					
	1%	12%	16%	29%	5%	6%	9%	21%	10%	6%	30%	47%	0%	0%	0%	0%	1%	1%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	13	15	37		3	4	8		4	5	16		0	2	7		7	10	21		2	3	7		1	5	9	
	17%	19%	48%	84%	4%	5%	10%	19%	5%	6%	21%	32%	0%	3%	9%	12%	9%	13%	27%	49%	3%	4%	9%	16%	1%	6%	12%	19%

Question 6 *Teachers do not have time to participate in educational research.*

Table 31:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	11	11	14		11	11	19																	
	14%	14%	18%	47%	14%	14%	25%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	2	2	6		4	8	10		14	8	14		2	4	3		0	0	0					
	3%	3%	8%	13%	5%	10%	13%	29%	18%	10%	18%	47%	3%	5%	4%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	3	3		10	9	19		4	3	10		5	5	1		0	0	0					
	3%	4%	4%	11%	14%	12%	26%	51%	5%	4%	14%	23%	7%	7%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	18	18	30		0	0	0		3	1	2		0	0	0		1	3	0		0	0	0	
	24%	24%	39%	87%	0%	0%	0%	0%	4%	1%	3%	8%	0%	0%	0%	0%	1%	4%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	6	10	12		8	6	5		3	2	7		4	1	4		1	3	4		0	0	1	
	8%	13%	16%	36%	10%	8%	6%	25%	4%	3%	9%	16%	5%	1%	5%	12%	1%	4%	5%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	8	9	20		9	7	10		3	3	1		2	3	1		0	0	1					
	10%	12%	26%	48%	12%	9%	13%	34%	4%	4%	1%	9%	3%	4%	1%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	6	12	15		10	7	5		1	3	8		4	0	1		0	0	4		1	0	0	
	8%	16%	19%	43%	13%	9%	6%	29%	1%	4%	10%	16%	5%	0%	1%	6%	0%	0%	5%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	2	1		3	0	8		8	5	5		5	5	8		1	3	2		3	5	7		0	2	1	
	1%	3%	1%	6%	4%	0%	11%	15%	11%	7%	7%	25%	7%	7%	11%	25%	1%	4%	3%	8%	4%	7%	10%	21%	0%	3%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	4	7	11		6	5	5		11	8	17		0	0	0		1	2	0					
	5%	9%	14%	29%	8%	6%	6%	21%	14%	10%	22%	47%	0%	0%	0%	0%	1%	3%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	18	18	29		7	3	5		10	5	10		4	3	2		12	12	14		5	5	2		6	4	5	
	23%	23%	38%	84%	9%	4%	6%	19%	13%	6%	13%	32%	5%	4%	3%	12%	16%	16%	18%	49%	6%	6%	3%	16%	8%	5%	6%	19%

Question 7 *Educational researchers tend to be non-practitioners.*

Table 32:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	5	18	13		6	8	27																	
	6%	23%	17%	47%	8%	10%	35%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	3	6		3	7	12		6	12	18		1	4	4		0	0	0					
	1%	4%	8%	13%	4%	9%	16%	29%	8%	16%	23%	47%	1%	5%	5%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	3	5		7	8	23		2	6	9		2	7	2		0	0	0					
	0%	4%	7%	11%	9%	11%	31%	51%	3%	8%	12%	23%	3%	9%	3%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	10	21	35		0	0	0		1	1	4		0	0	0		0	4	0		0	0	0	
	13%	28%	46%	87%	0%	0%	0%	0%	1%	1%	5%	8%	0%	0%	0%	0%	0%	5%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	4	8	16		2	9	8		2	1	9		2	2	5		1	6	1		0	0	1	
	5%	10%	21%	36%	3%	12%	10%	25%	3%	1%	12%	16%	3%	3%	6%	12%	1%	8%	1%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	4	10	23		4	10	12		3	3	1		0	3	3		0	0	1					
	5%	13%	30%	48%	5%	13%	16%	34%	4%	4%	1%	9%	0%	4%	4%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	4	10	19		4	8	10		2	4	6		1	1	3		0	2	2		0	1	0	
	5%	13%	25%	43%	5%	10%	13%	29%	3%	5%	8%	16%	1%	1%	4%	6%	0%	3%	3%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	4	0		3	2	6		3	10	5		2	2	14		0	3	3		1	4	10		1	1	1	
	0%	6%	0%	6%	4%	3%	8%	15%	4%	14%	7%	25%	3%	3%	19%	25%	0%	4%	4%	8%	1%	6%	14%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	4	7	11		2	7	7		5	10	21		0	0	0		0	2	1					
	5%	9%	14%	29%	3%	9%	9%	21%	6%	13%	27%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	8	22	35		1	6	8		6	8	11		1	6	2		8	13	17		1	8	3		4	5	6	
	10%	29%	45%	84%	1%	8%	10%	19%	8%	10%	14%	32%	1%	8%	3%	12%	10%	17%	22%	49%	1%	10%	4%	16%	5%	6%	8%	19%

Question 8 *a)* *Research methods in education are firmly rooted in scientific practice.*

b) *Research methods in education are firmly rooted in educational practice.*

Table 33:

	(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)	
Attributes	1&2		3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male					Female																			
	4		21	11		5	24	12																	
	5%		27%	14%	47%	6%	31%	16%	53%																
Age	Under 30					Under 40				Under 50				Under 60				Over 60							
	2		5	3		3	15	4		4	20	12		0	5	4		0	0	0					
	3%		6%	4%	13%	4%	19%	5%	29%	5%	26%	16%	47%	0%	6%	5%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed					PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0		6	2		5	22	11		3	9	5		0	7	4		0	0	0					
	0%		8%	3%	11%	7%	30%	15%	51%	4%	12%	7%	23%	0%	9%	5%	15%	0%	0%	0%	0%				
Current Place of Employment	School					University				HEI				College of Education				School of Education				Other			
	8		37	21		0	0	0		0	4	2		0	0	0		0	4	0		0	0	0	
	11%		49%	28%	87%	0%	0%	0%	0%	0%	5%	3%	8%	0%	0%	0%	0%	0%	5%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years					5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	6		15	7		0	16	3		2	7	3		0	3	6		1	3	4		0	1	0	
	8%		19%	9%	36%	0%	21%	4%	25%	3%	9%	4%	16%	0%	4%	8%	12%	1%	4%	5%	10%	0%	1%	0%	1%
Current Position	Teacher					Middle Manager				Senior Manager				Lecturer				Other							
	5		21	11		2	15	9		1	4	2		0	5	1		1	0	0					
	6%		27%	14%	48%	3%	19%	12%	34%	1%	5%	3%	9%	0%	6%	1%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years					5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	6		19	8		1	16	5		1	5	6		0	2	3		1	2	1		0	1	0	
	8%		25%	10%	43%	1%	21%	6%	29%	1%	6%	8%	16%	0%	3%	4%	6%	1%	3%	1%	5%	0%	1%	0%	1%
Date Completed TT Course	1961-1965					1966-1970				1971-1975				1976-1980				1981-1985				1986-1990			
	0		2	2		1	6	4		3	8	7		1	12	5		1	4	1		1	10	4	
	0%		3%	3%	6%	1%	8%	6%	15%	4%	11%	10%	25%	1%	17%	7%	25%	1%	6%	1%	8%	1%	14%	6%	21%
Where Trained	HEI					School of Education				University Department				Correspondence Course				Other							
	0		14	8		2	11	3		7	18	11		0	0	0		0	2	1					
	0%		18%	10%	29%	3%	14%	4%	21%	9%	23%	14%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator					Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher			
	9		33	23		1	9	5		3	12	10		1	4	4		5	22	11		2	7	3	
	12%		43%	30%	84%	1%	12%	6%	19%	4%	16%	13%	32%	1%	5%	5%	12%	6%	29%	14%	49%	3%	9%	4%	16%

	(a)		(b)		(a)		(b)	
Attributes	1&2		3	4&5	Total	1&2	3	4&5	Total
Gender									
Age									
Qualifications									
Current Place of Employment	Other								
	0		0	0					
	0%		0%	0%	0%				
Length of Time in Current Institution	Over 25 Years								
	0		1	0					
	0%		1%	0%	1%				
Current Position									
Length of Time in Current Position	Over 25 Years								
	0		1	0					
	0%		1%	0%	1%				
Date Completed TT Course	1986-1990					1991-			
	1		10	4		2	1	0	
	1%		14%	6%	21%	3%	1%	0%	4%
Where Trained									
Desciptor	Educational Researcher					Student of Education			
	2		7	3		2	9	4	
	3%		9%	4%	16%	3%	12%	5%	19%

Question 9 *a)* *Educational theory is aimed at organising and explaining specific aspects of the educational environment.*

b) *Educational theory is a series of generalisations by which we attempt to explain some phenomena in a systematic manner.*

Table 34:

	(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)	
Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	5	19	12		9	17	15																	
	6%	25%	16%	47%	12%	22%	19%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	3	6	1		3	14	5		7	12	17		1	4	4		0	0	0					
	4%	8%	1%	13%	4%	18%	6%	29%	9%	16%	22%	47%	1%	5%	5%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	4	2		6	17	15		4	8	5		1	6	4		0	0	0					
	3%	5%	3%	11%	8%	23%	20%	51%	5%	11%	7%	23%	1%	8%	5%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	13	29	24		0	0	0		1	3	2		0	0	0		0	3	1		0	0	0	
	17%	38%	32%	87%	0%	0%	0%	0%	1%	4%	3%	8%	0%	0%	0%	0%	0%	4%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	6	15	7		2	12	5		4	4	4		0	1	8		2	3	3		0	1	0	
	8%	19%	9%	36%	3%	16%	6%	25%	5%	5%	5%	16%	0%	1%	10%	12%	3%	4%	4%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	5	17	15		7	11	8		1	4	2		1	3	2		0	1	0					
	6%	22%	19%	48%	9%	14%	10%	34%	1%	5%	3%	9%	1%	4%	3%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	5	19	9		6	10	6		3	4	5		0	1	4		0	2	2		0	0	1	
	6%	25%	12%	43%	8%	13%	8%	29%	4%	5%	6%	16%	0%	1%	5%	6%	0%	3%	3%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	1	3		1	2	8		6	6	6		3	8	7		0	5	1		4	9	2		0	3	0	
	0%	1%	4%	6%	1%	3%	11%	15%	8%	8%	8%	25%	4%	11%	10%	25%	0%	7%	1%	8%	6%	13%	3%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	4	9	9		4	7	5		6	18	12		0	0	0		0	2	1					
	5%	12%	12%	29%	5%	9%	6%	21%	8%	23%	16%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	12	28	25		3	7	5		5	11	9		0	5	4		6	17	15		1	5	6		4	6	5	
	16%	36%	32%	84%	4%	9%	6%	19%	6%	14%	12%	32%	0%	6%	5%	12%	8%	22%	19%	49%	1%	6%	8%	16%	5%	8%	6%	19%

Question 10 *a)* *Educational research is an extension of knowledge*

b) *Educational research is a fraud*

Table 35:

	(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)		(a)		(b)	
Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	18	13	5		23	13	5																	
	23%	17%	6%	47%	30%	17%	6%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	5	5	0		9	12	1		20	8	8		7	1	1		0	0	0					
	6%	6%	0%	13%	12%	16%	1%	29%	26%	10%	10%	47%	9%	1%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	7	1	0		15	16	7		10	6	1		7	2	2		0	0	0					
	9%	1%	0%	11%	20%	22%	9%	51%	14%	8%	1%	23%	9%	3%	3%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	35	23	8		0	0	0		5	0	1		0	0	0		0	3	1		0	0	0	
	46%	30%	11%	87%	0%	0%	0%	0%	7%	0%	1%	8%	0%	0%	0%	0%	0%	4%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	11	4		10	7	2		6	4	2		5	4	0		6	0	2		1	0	0	
	17%	14%	5%	36%	13%	9%	3%	25%	8%	5%	3%	16%	6%	5%	0%	12%	8%	0%	3%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	17	14	6		17	8	1		4	2	1		2	2	2		1	0	0					
	22%	18%	8%	48%	22%	10%	1%	34%	5%	3%	1%	9%	3%	3%	3%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	13	15	5		12	7	3		8	2	2		3	2	0		4	0	0		1	0	0	
	17%	19%	6%	43%	16%	9%	4%	29%	10%	3%	3%	16%	4%	3%	0%	6%	5%	0%	0%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	3	0	1		9	0	2		13	1	4		5	11	2		2	4	0		6	8	1		1	2	0	
	4%	0%	1%	6%	13%	0%	3%	15%	18%	1%	6%	25%	7%	15%	3%	25%	3%	6%	0%	8%	8%	11%	1%	21%	1%	3%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	16	4	2		5	8	3		18	14	4		0	0	0		2	0	1					
	21%	5%	3%	29%	6%	10%	4%	21%	23%	18%	5%	47%	0%	0%	0%	0%	3%	0%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	35	20	10		10	5	0		18	5	2		7	1	1		25	9	4		7	4	1		12	3	0	
	45%	26%	13%	84%	13%	6%	0%	19%	23%	6%	3%	32%	9%	1%	1%	12%	32%	12%	5%	49%	9%	5%	1%	16%	16%	4%	0%	19%

SECTION C - THE NATURE OF TEACHING AS AN EDUCATIONAL PROCESS (Appendix 9)

This section examined the study population's knowledge of the nature of teaching. Respondents were asked to indicate their opinion on a bipolar scale. The scale was divided into five columns as in the previous section. This enabled the analysis to follow the pattern of positive and negative responses as established throughout this research. Columns 1 and 2 scores were combined to produce each cohort's responses strongly disagree/disagree. Columns 4 and 5 scores were combined to produce each cohort's responses agree/strongly agree. Column 3 enabled respondents to neither agree nor disagree with each statement.

Question 1: *Teaching is a skill*

Nearly all of the study population agreed with this statement (Table 36). The exceptions were undecided. These were two males under 50, a middle manager and a senior manager who had both studied in a school of education. It would be interesting to determine why they were undecided about the statement. The results within the context of the study as a whole reflect the belief of the majority of the respondents that ITT should include research and educational theory. If teaching is a skill it requires knowledge of its craft. This knowledge is immersed in the study and understanding of education.

Question 2: *Teaching is an art*

The majority of respondents agreed that teaching is an art, under 10% of the study population disagreed (Table 37). The exceptions were evenly distributed amongst each cohort with no obvious differences. These results reflect the findings in previous

sections and correlate with the statement that teaching is a skill. The inclusion of theory and research in ITT courses is essential for the development of the art of teaching. The relationship between educational theory, research and practice is both creative and scientific, and is therefore an art (Chapters 1 and 2).

Question 3: *Teachers learn to teach*

The majority of the study population agreed that teachers learn to teach (Table 38). If teachers learn to teach what is the process? Does it include observation and instruction? The emphasis on practice in current ITT courses implies that students learn by default and/or guidance, 'if at first you don't succeed etc.'. The relationship between theory and practice within this context appears tenuous. Perhaps that is why the majority of teachers/lecturers have agreed that theory and practice should be included in the ITT curriculum.

There is a need to develop the relationship between educational theory and practice within the context of practice. The exclusion of educational theory and research from ITT would lead to practice developing as an operational discipline which precluded knowledge and understanding of education. Teachers and lecturers share the belief that educational theory and research are relevant to practice. Is this reason enough for the inclusion of theoretical and research courses in ITT?

Question 4: *Teachers are 'born and not made'*

The distribution of scores shown reveals no clear majority in agreement or disagreement with the above (Table 39). There were very minor differences between teachers (more agreed than disagreed) and middle/senior managers (more disagreed than agreed). The

remainder illustrates an even distribution, with the exception of respondents who trained in 1976-1980 and have been in posts for 5-9 years, who tended to agree with the above.

The suggestion that teachers are 'born and not made' is in juxtaposition to the previous statement, teachers learn to teach. Or is it? In essence teaching, as an art may be a natural phenomena, however further guidance would assist not desist from the desired outcome. Natural talent can, as in other areas, be nurtured to create an improved model. Difficulties arise when the design of the model, natural or otherwise, does not relate to the knowledge gained from study. The student teacher should be in a position to select materials relevant to practice. A discerning student would require knowledge encompassing theory and research in order to determine and define practice.

Question 5: *Learning to teach requires the process of acquiring knowledge*

Having agreed that teachers learn to teach, the majority of the study population also agreed learning to teach requires the process of acquiring knowledge (Table 40). The exceptions were undecided, only 4% disagreed. There were few apparent differences between each cohort of respondents. The results correlate with the study population's response to Sections A and B, educational theory and research should be included in ITT courses. The relevance of theory to practice is evident in each section of the results. What is less evident is how, in practice, theory and research can be applied.

Question 6: *Learning is the process of acquiring knowledge which is understood and of use*

The majority of the study population agreed with the above statement (Table 41). This correlates with the results of Section A of this study. The need to relate theory to

practice was evident throughout Parts One and Two (Tables 1-25). Where ITT courses had not appeared relevant this was due to the disparity between content and practice. During their own training teachers had found theoretical and research elements to be not relevant to practice (Section A). However the majority of respondents were in agreement that educational theory and research should be included in the ITT curriculum. The understanding and application of knowledge are two elements of educational study which would appear to be disparate, collaboration would resolve many of the issues raised throughout this research. The understanding of a theory does not necessarily require the skills to apply theory to practice. Equally practical skills are not required in order to generate theoretical knowledge.

Question 7: *Knowledge of teaching is acquired through practice*

Table 42 illustrates that the majority of the study population agreed that knowledge of teaching is acquired through practice. The study population agreed that teaching can be learnt, it can also be acquired through practice and there is an element of natural ability. Policy makers would be mistaken if they determined that one of the three statements alone became the basis for the training of teachers. All ingredients should be available in equal measure to be adapted according to individual requirements.

Question 8 : *ITT courses contribute to good practice in secondary schools*

The majority of respondents agreed that ITT courses contribute to good practice in secondary schools (Table 43). Exceptions (35%) were undecided. The two teachers who disagreed both trained in university departments; whilst the number of disagreements is less than significant, comparisons with earlier results are evident. It is relevant to current developments in secondary schools that ITT courses should

contribute to good practice. Should ITT detract from secondary education the consequences would be serious. Given the speed of change it would be interesting to repeat this questionnaire at the end of the next academic year. This would enable educationalists to establish whether the transition of ITT from HEIs to schools was a positive move.

Question 9: *Educational research is a social science*

The majority of the study population agreed that educational research is a social science (Table 44). The exceptions in all but 6% of cases were undecided. This included the cohort of university graduates, teaching for 0-10 years, with teacher or middle management status. This correlates with earlier findings, ITT courses since 1986 have been influenced by the ERA (DES, 1988a) and CATE (Chapter 3), in that ITT has become curriculum led. University departments have been restricted by Government policies, the focus of which has been the reduction of theory and an increase in practice. A consequence of this policy has been a limited knowledge and understanding of educational research, as illustrated throughout this study. In contrast practising teachers participating in this study agreed that educational theory and research should be included in ITT courses.

Question 10: *The study of education is a natural science*

The majority of the study population disagreed with the above (Table 45). However there were a number of significant exceptions which may imply a limited knowledge of the terminology. This question was included to test the study population's knowledge and understanding of education within a scientific context. The cohort of teachers trained at higher education colleges for education degrees were undecided in their

response. Previously it had appeared that university graduates had a more limited understanding of educational theory and research. It would now appear that both education and university graduates have a limited understanding of the term 'natural sciences'. The results do substantiate the view that a broader based ITT curriculum would increase students knowledge of educational issues.

Question 11: *Knowledge and an understanding of social sciences is relevant to educational practice*

The majority of the study population agreed that knowledge and an understanding of social sciences is relevant to educational practice (Table 46). The exceptions were, in most cases from the cohort of university graduates, trained since 1986 and with less than 5 years experience, who were undecided. Those who disagreed (5%) were also from the cohort of university graduates. The results reveal a correlation with Sections A and B; the study population was in agreement that knowledge of social sciences is relevant to educational practice. As suggested this may reflect the respondents' own limited experience of social science courses during training. The results may also imply that recent changes to ITT courses would not have produced the desired outcome for practising teachers. A more theoretical emphasis would be required to redress the balance of understanding between educational theorists, researchers and practitioners. As indicated, a broad-based ITT course should provide knowledge and an understanding of social sciences relevant to educational practice.

Question 12: *ITT courses should include the study of social sciences*

Having agreed that knowledge of social sciences is relevant to good practice, the majority of the study population also agreed with the above (Table 47). The exceptions

are not dissimilar to results illustrated by the previous table. The distribution of responses focused again on the cohort of university graduates with less than 5 years experience who were undecided, this may reflect their experience of PGCE courses which contained little theory. The emphasis on practice may have diminished students' knowledge of educational theory and research.

Question 13: *ITT should be school based*

The distribution of scores illustrated reflect earlier findings (Table 48). Results were evenly distributed, 35% of the study population disagreed, 35% were undecided and 30% agreed. The cohort of university graduates was the exception with 44% in agreement, this may reflect the practical focus of their own experience of PGCE courses.

These results are indicative of the dilemmas experienced by educationalists as changes to established systems are thrust upon them. However the effects of current changes to schools will have to be determined through further research. The benefits to students will not be measurable in the immediate future. The losses to HEIs are apparent but not, at this stage, quantifiable. What is evident from this research is that the respondents are committed to the inclusion of educational theory, research and elements of the social sciences in the ITT curriculum. This being the central issue, secondary schools are not in a position to provide such courses. Thus the Government's emphasis on practice in ITT courses contradicts with the findings of this research. The more practice based ITT courses become, the less teachers will understand the theory and research of education. The disparate disciplines of educational theory, research and practice will therefore remain.

CONCLUSIONS - SECTION C

Interestingly, the study population agreed that teaching is both a skill and an art (Tables 36 and 37). If teaching is a skill it is more than operational it requires knowledge of its craft, knowledge which is immersed in the study of education. The inclusion of educational theory and research in the ITT curriculum is therefore critical to the development of teaching as a skill and an art. Consistent with earlier results the study population also agreed that teachers learn to teach (Table 38). The student teacher should therefore be exposed to all aspects of education; theory, research and practice in preparation for entry into the teaching profession. Significantly a third of the study population also considered that teachers were 'born and not made'. To nurture such talents a broad-based course would be required.

The study population agreed that learning to teach requires knowledge (Table 40). In addition respondents considered that practice was essential in the training of teachers as knowledge of teaching emerges from practice. The researcher concludes that educational theory, research and practice should be included in the ITT curriculum and be adapted according to individual needs.

The place for ITT remained an unresolved issue. The study population agreed that ITT courses contributed to good practice in secondary schools (Table 43). However the study population could not agree where ITT courses should be based, schools or HEIs.

The researcher considers that an understanding of educational terminology is fundamental to educational theory, research and practice. Whilst the majority of the study population agreed that the study of educational research is a social science, respondents did not have an understanding of research and the natural sciences (Table 45). The study population agreed that knowledge and an understanding of the social sciences is relevant to educational practice (Table 46). The majority of respondents also agreed that ITT courses should include the study of social sciences (Table 47). The study population's responses to these questions appear to differ from the respondents' own experience of social science courses.

The discussion of the results contained in Section C of this research concludes the descriptive analysis of the data emanating from the questionnaire. In the following chapter, part two of the analysis will relate the results of this research to key issues emerging from the literature search (Chapters 1, 2 and 3).

Question 1 *Teaching is a skill*

Table 36:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	0	2	34		0	0	41																	
	0%	3%	44%	47%	0%	0%	53%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	0	0	10		0	0	22		0	2	34		0	0	9		0	0	0					
	0%	0%	13%	13%	0%	0%	29%	29%	0%	3%	44%	47%	0%	0%	12%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	0	8		0	1	37		0	0	17		0	1	10		0	0	0					
	0%	0%	11%	11%	0%	1%	50%	51%	0%	0%	23%	23%	0%	1%	14%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	0	1	65		0	0	0		0	0	6		0	0	0		0	1	3		0	0	0	
	0%	1%	86%	87%	0%	0%	0%	0%	0%	0%	8%	8%	0%	0%	0%	0%	0%	1%	4%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	0	28		0	1	18		0	0	12		0	0	9		0	1	7		0	0	1	
	0%	0%	36%	36%	0%	1%	23%	25%	0%	0%	16%	16%	0%	0%	12%	12%	0%	1%	9%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	0	0	37		0	1	25		0	1	6		0	0	6		0	0	1					
	0%	0%	48%	48%	0%	1%	32%	34%	0%	1%	8%	9%	0%	0%	8%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	1	32		0	1	21		0	0	12		0	0	5		0	0	4		0	0	1	
	0%	1%	42%	43%	0%	1%	27%	29%	0%	0%	16%	16%	0%	0%	6%	6%	0%	0%	5%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	0	4		0	1	10		0	0	18		0	1	17		0	0	6		0	0	15		0	0	3	
	0%	0%	6%	6%	0%	1%	14%	15%	0%	0%	25%	25%	0%	1%	24%	25%	0%	0%	8%	8%	0%	0%	21%	21%	0%	0%	4%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	0	22		0	2	14		0	0	36		0	0	0		0	0	3					
	0%	0%	29%	29%	0%	3%	18%	21%	0%	0%	47%	47%	0%	0%	0%	0%	0%	0%	4%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	0	2	63		0	1	14		0	2	23		0	1	8		0	2	36		0	1	11		0	1	14	
	0%	3%	82%	84%	0%	1%	18%	19%	0%	3%	30%	32%	0%	1%	10%	12%	0%	3%	47%	49%	0%	1%	14%	16%	0%	1%	18%	19%

Question 2 *Teaching is an art*

Table 37:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	4	2	30		3	7	31																	
	5%	3%	39%	47%	4%	9%	40%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	1	8		1	3	18		3	3	30		2	2	5		0	0	0					
	1%	1%	10%	13%	1%	4%	23%	29%	4%	4%	39%	47%	3%	3%	6%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	0	6		3	4	31		0	3	14		2	2	7		0	0	0					
	3%	0%	8%	11%	4%	5%	42%	51%	0%	4%	19%	23%	3%	3%	9%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	6	8	52		0	0	0		1	0	5		0	0	0		0	1	3		0	0	0	
	8%	11%	68%	87%	0%	0%	0%	0%	1%	0%	7%	8%	0%	0%	0%	0%	0%	1%	4%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	3	3	22		2	5	12		2	0	10		0	0	9		0	1	7		0	0	1	
	4%	4%	29%	36%	3%	6%	16%	25%	3%	0%	13%	16%	0%	0%	12%	12%	0%	1%	9%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	4	4	29		2	5	19		0	0	7		1	0	5		0	0	1					
	5%	5%	38%	48%	3%	6%	25%	34%	0%	0%	9%	9%	1%	0%	6%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	3	5	25		2	3	17		1	0	11		0	0	5		0	1	3		1	0	0	
	4%	6%	32%	43%	3%	4%	22%	29%	1%	0%	14%	16%	0%	0%	6%	6%	0%	1%	4%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	2	1		0	1	10		3	0	15		2	3	13		0	1	5		1	2	12		0	0	3	
	1%	3%	1%	6%	0%	1%	14%	15%	4%	0%	21%	25%	3%	4%	18%	25%	0%	1%	7%	8%	1%	3%	17%	21%	0%	0%	4%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	1	2	19		3	3	10		2	4	30		0	0	0		1	0	2					
	1%	3%	25%	29%	4%	4%	13%	21%	3%	5%	39%	47%	0%	0%	0%	0%	1%	0%	3%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	7	7	51		2	2	11		2	3	20		0	2	7		4	7	27		3	2	7		1	1	13	
	9%	9%	66%	84%	3%	3%	14%	19%	3%	4%	26%	32%	0%	3%	9%	12%	5%	9%	35%	49%	4%	3%	9%	16%	1%	1%	17%	19%

Question 3 *Teachers learn to teach*

Table 38:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	0	5	31		1	5	35																	
	0%	6%	40%	47%	1%	6%	45%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	1	8		0	3	19		0	5	31		0	1	8		0	0	0					
	1%	1%	10%	13%	0%	4%	25%	29%	0%	6%	40%	47%	0%	1%	10%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	1	7		1	5	32		0	3	14		0	1	10		0	0	0					
	0%	1%	9%	11%	1%	7%	43%	51%	0%	4%	19%	23%	0%	1%	14%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	1	9	56		0	0	0		0	1	5		0	0	0		0	0	4		0	0	0	
	1%	12%	74%	87%	0%	0%	0%	0%	0%	1%	7%	8%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	5	23		1	2	16		0	1	11		0	0	9		0	2	6		0	0	1	
	0%	6%	30%	36%	1%	3%	21%	25%	0%	1%	14%	16%	0%	0%	12%	12%	0%	3%	8%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	1	5	31		0	2	24		0	2	5		0	1	5		0	0	1					
	1%	6%	40%	48%	0%	3%	31%	34%	0%	3%	6%	9%	0%	1%	6%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	0	4	29		1	5	16		0	0	12		0	0	5		0	1	3		0	0	1	
	0%	5%	38%	43%	1%	6%	21%	29%	0%	0%	16%	16%	0%	0%	6%	6%	0%	1%	4%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	0	4		0	3	8		0	3	15		0	1	17		0	1	5		1	2	12		0	0	3	
	0%	0%	6%	6%	0%	4%	11%	15%	0%	4%	21%	25%	0%	1%	24%	25%	0%	1%	7%	8%	1%	3%	17%	21%	0%	0%	4%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	2	20		0	6	10		1	2	33		0	0	0		0	0	3					
	0%	3%	26%	29%	0%	8%	13%	21%	1%	3%	43%	47%	0%	0%	0%	0%	0%	0%	4%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	1	9	55		0	3	12		0	4	21		0	2	7		0	5	33		0	2	10		1	4	10	
	1%	12%	71%	84%	0%	4%	16%	19%	0%	5%	27%	32%	0%	3%	9%	12%	0%	6%	43%	49%	0%	3%	13%	16%	1%	5%	13%	19%

Question 4 *Teachers are 'born and not made'*

Table 39:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	16	11	9		10	14	17																	
	21%	14%	12%	47%	13%	18%	22%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	0	6	4		7	8	7		15	8	13		4	3	2		0	0	0					
	0%	8%	5%	13%	9%	10%	9%	29%	19%	10%	17%	47%	5%	4%	3%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	3	4		15	13	10		2	5	10		6	4	1		0	0	0					
	1%	4%	5%	11%	20%	18%	14%	51%	3%	7%	14%	23%	8%	5%	1%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	21	23	22		0	0	0		3	1	2		0	0	0		2	1	1		0	0	0	
	28%	30%	29%	87%	0%	0%	0%	0%	4%	1%	3%	8%	0%	0%	0%	0%	3%	1%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	8	11	9		9	6	4		4	3	5		3	2	4		1	3	4		1	0	0	
	10%	14%	12%	36%	12%	8%	5%	25%	5%	4%	6%	16%	4%	3%	5%	12%	1%	4%	5%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	9	16	12		11	6	9		4	2	1		2	1	3		0	0	1					
	12%	21%	16%	48%	14%	8%	12%	34%	5%	3%	1%	9%	3%	1%	4%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	12	11	10		6	6	10		3	4	5		2	2	1		2	2	0		1	0	0	
	16%	14%	13%	43%	8%	8%	13%	29%	4%	5%	6%	16%	3%	3%	1%	6%	3%	3%	0%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	2	2	0		4	4	3		7	4	7		5	3	10		3	2	1		4	7	4		0	2	1	
	3%	3%	0%	6%	6%	6%	4%	15%	10%	6%	10%	25%	7%	4%	14%	25%	4%	3%	1%	8%	6%	10%	6%	21%	0%	3%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	5	8	9		6	5	5		14	11	11		0	0	0		1	1	1					
	6%	10%	12%	29%	8%	6%	6%	21%	18%	14%	14%	47%	0%	0%	0%	0%	1%	1%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	23	22	20		8	6	1		13	6	6		3	4	2		16	8	14		7	3	2		7	6	2	
	30%	29%	26%	84%	10%	8%	1%	19%	17%	8%	8%	32%	4%	5%	3%	12%	21%	10%	18%	49%	9%	4%	3%	16%	9%	8%	3%	19%

Question 5 *Learning to teach requires the process of acquiring knowledge*

Table 40:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	2	7	27		1	7	33																	
	3%	9%	35%	47%	1%	9%	43%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	2	7		1	8	13		0	4	32		1	0	8		0	0	0					
	1%	3%	9%	13%	1%	10%	17%	29%	0%	5%	42%	47%	1%	0%	10%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	0	7		1	8	29		1	2	14		0	4	7		0	0	0					
	1%	0%	9%	11%	1%	11%	39%	51%	1%	3%	19%	23%	0%	5%	9%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	2	9	55		0	0	0		1	1	4		0	0	0		0	4	0		0	0	0	
	3%	12%	72%	87%	0%	0%	0%	0%	1%	1%	5%	8%	0%	0%	0%	0%	0%	5%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	5	21		0	5	14		1	2	9		0	2	7		0	0	8		0	0	1	
	3%	6%	27%	36%	0%	6%	18%	25%	1%	3%	12%	16%	0%	3%	9%	12%	0%	0%	10%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	2	5	30		1	5	20		0	0	7		0	4	2		0	0	1					
	3%	6%	39%	48%	1%	6%	26%	34%	0%	0%	9%	9%	0%	5%	3%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	8	23		0	4	18		1	2	9		0	0	5		0	0	4		0	0	1	
	3%	10%	30%	43%	0%	5%	23%	29%	1%	3%	12%	16%	0%	0%	6%	6%	0%	0%	5%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	0	4		0	0	11		0	1	17		0	5	13		0	3	3		2	5	8		0	0	3	
	0%	0%	6%	6%	0%	0%	15%	15%	0%	1%	24%	25%	0%	7%	18%	25%	0%	4%	4%	8%	3%	7%	11%	21%	0%	0%	4%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other											
	2	1	19		0	6	10		1	7	28		0	0	0		0	0	3									
	3%	1%	25%	29%	0%	8%	13%	21%	1%	9%	36%	47%	0%	0%	0%	0%	0%	0%	4%	4%								
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	2	10	53		0	3	12		0	4	21		0	2	7		2	6	30		0	3	9		0	3	12	
	3%	13%	69%	84%	0%	4%	16%	19%	0%	5%	27%	32%	0%	3%	9%	12%	3%	8%	39%	49%	0%	4%	12%	16%	0%	4%	16%	19%

Question 6 *Learning is the process of acquiring knowledge which is understood and of use*

Table 41:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	4	5	27		3	3	35																	
	5%	6%	35%	47%	4%	4%	45%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	0	1	9		1	3	18		5	3	28		1	1	7		0	0	0					
	0%	1%	12%	13%	1%	4%	23%	29%	6%	4%	36%	47%	1%	1%	9%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	2	1	5		3	3	32		1	1	15		1	2	8		0	0	0					
	3%	1%	7%	11%	4%	4%	43%	51%	1%	1%	20%	23%	1%	3%	11%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	4	6	56		0	0	0		1	1	4		0	0	0		2	1	1		0	0	0	
	5%	8%	74%	87%	0%	0%	0%	0%	1%	1%	5%	8%	0%	0%	0%	0%	3%	1%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	6	20		2	0	17		1	1	10		2	0	7		0	0	8		0	1	0	
	3%	8%	26%	36%	3%	0%	22%	25%	1%	1%	13%	16%	3%	0%	9%	12%	0%	0%	10%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	4	2	31		2	3	21		0	1	6		1	2	3		0	0	1					
	5%	3%	40%	48%	3%	4%	27%	34%	0%	1%	8%	9%	1%	3%	4%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	6	25		2	1	19		2	0	10		1	0	4		0	1	3		0	0	1	
	3%	8%	32%	43%	3%	1%	25%	29%	3%	0%	13%	16%	1%	0%	5%	6%	0%	1%	4%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	0	4		1	1	9		2	1	15		2	2	14		1	1	4		0	3	12		0	0	3	
	0%	0%	6%	6%	1%	1%	13%	15%	3%	1%	21%	25%	3%	3%	19%	25%	1%	1%	6%	8%	0%	4%	17%	21%	0%	0%	4%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	2	2	18		2	2	12		3	4	29		0	0	0		0	0	3					
	3%	3%	23%	29%	3%	3%	16%	21%	4%	5%	38%	47%	0%	0%	0%	0%	0%	0%	4%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	6	7	52		1	2	12		1	2	22		1	0	8		2	4	32		1	1	10		0	1	14	
	8%	9%	68%	84%	1%	3%	16%	19%	1%	3%	29%	32%	1%	0%	10%	12%	3%	5%	42%	49%	1%	1%	13%	16%	0%	1%	18%	19%

Question 7 *Knowledge of teaching is acquired through practice*

Table 42:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	2	6	28		1	5	35																	
	3%	8%	36%	47%	1%	6%	45%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	0	1	9		1	2	19		2	5	29		0	3	6		0	0	0					
	0%	1%	12%	13%	1%	3%	25%	29%	3%	6%	38%	47%	0%	4%	8%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	0	8		1	5	32		1	1	15		1	5	5		0	0	0					
	0%	0%	11%	11%	1%	7%	43%	51%	1%	1%	20%	23%	1%	7%	7%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	2	9	55		0	0	0		0	1	5		0	0	0		1	1	2		0	0	0	
	3%	12%	72%	87%	0%	0%	0%	0%	0%	1%	7%	8%	0%	0%	0%	0%	1%	1%	3%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	4	23		2	2	15		0	0	12		0	2	7		0	2	6		0	1	0	
	1%	5%	30%	36%	3%	3%	19%	25%	0%	0%	16%	16%	0%	3%	9%	12%	0%	3%	8%	10%	0%	1%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	0	4	33		2	3	21		1	2	4		0	2	4		0	0	1					
	0%	5%	43%	48%	3%	4%	27%	34%	1%	3%	5%	9%	0%	3%	5%	8%	0%	0%	1%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	4	27		1	2	19		0	3	9		0	1	4		0	1	3		0	0	1	
	3%	5%	35%	43%	1%	3%	25%	29%	0%	4%	12%	16%	0%	1%	5%	6%	0%	1%	4%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	0	2	2		0	4	7		1	2	15		2	0	16		0	1	5		0	1	14		0	1	2	
	0%	3%	3%	6%	0%	6%	10%	15%	1%	3%	21%	25%	3%	0%	22%	25%	0%	1%	7%	8%	0%	1%	19%	21%	0%	1%	3%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	1	3	18		1	3	12		1	3	32		0	0	0		0	2	1					
	1%	4%	23%	29%	1%	4%	16%	21%	1%	4%	42%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	2	9	54		1	4	10		2	6	17		1	1	7		2	9	27		1	4	7		0	5	10	
	3%	12%	70%	84%	1%	5%	13%	19%	3%	8%	22%	32%	1%	1%	9%	12%	3%	12%	35%	49%	1%	5%	9%	16%	0%	6%	13%	19%

Question 8 *ITT courses contribute to good practice in secondary schools*

Table 43

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	1	11	24		1	16	24																	
	1%	14%	31%	47%	1%	21%	31%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	4	5		0	10	12		1	12	23		0	1	8		0	0	0					
	1%	5%	6%	13%	0%	13%	16%	29%	1%	16%	30%	47%	0%	1%	10%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	2	6		1	15	22		1	7	9		0	1	10		0	0	0					
	0%	3%	8%	11%	1%	20%	30%	51%	1%	9%	12%	23%	0%	1%	14%	15%	0%	0%	0%	0%				
Current Place of	School				University				HEI				College of Education				School of Education				Other			
Employment	2	27	37		0	0	0		0	0	6		0	0	0		0	0	4		0	0	0	
	3%	36%	49%	87%	0%	0%	0%	0%	0%	0%	8%	8%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%	0%
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
in Current	1	8	19		0	10	9		0	3	9		1	3	5		0	3	5		0	0	1	
Institution	1%	10%	25%	36%	0%	13%	12%	25%	0%	4%	12%	16%	1%	4%	6%	12%	0%	4%	6%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	2	16	19		0	9	17		0	2	5		0	0	6		0	0	1					
	3%	21%	25%	48%	0%	12%	22%	34%	0%	3%	6%	9%	0%	0%	8%	8%	0%	0%	1%	1%				
Length of Time	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
in Current	1	11	21		0	11	11		0	3	9		1	1	3		0	1	3		0	0	1	
Position	1%	14%	27%	43%	0%	14%	14%	29%	0%	4%	12%	16%	1%	1%	4%	6%	0%	1%	4%	5%	0%	0%	1%	1%
Date Completed	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
ITT Course	0	1	3		0	2	9		0	8	10		1	5	12		0	2	4		0	7	8		1	2	0	
	0%	1%	4%	6%	0%	3%	13%	15%	0%	11%	14%	25%	1%	7%	17%	25%	0%	3%	6%	8%	0%	10%	11%	21%	1%	3%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	0	6	16		0	3	13		2	16	18		0	0	0		0	2	1					
	0%	8%	21%	29%	0%	4%	17%	21%	3%	21%	23%	47%	0%	0%	0%	0%	0%	3%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	1	20	44		0	3	12		0	7	18		0	1	8		0	14	24		0	3	9		0	4	11	
	1%	26%	57%	84%	0%	4%	16%	19%	0%	9%	23%	32%	0%	1%	10%	12%	0%	18%	31%	49%	0%	4%	12%	16%	0%	5%	14%	19%

Question 9 *Educational research is a social science*

Table 44

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	4	9	23		1	18	22																	
	5%	12%	30%	47%	1%	23%	29%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	5	4		0	10	12		3	11	22		1	1	7		0	0	0					
	1%	6%	5%	13%	0%	13%	16%	29%	4%	14%	29%	47%	1%	1%	9%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	2	6		3	11	24		0	12	5		2	0	9		0	0	0					
	0%	3%	8%	11%	4%	15%	32%	51%	0%	16%	7%	23%	3%	0%	12%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	4	24	38		0	0	0		1	2	3		0	0	0		0	0	4		0	0	0	
	5%	32%	50%	87%	0%	0%	0%	0%	1%	3%	4%	8%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	11	16		1	7	11		1	4	7		1	2	6		1	3	4		0	0	1	
	1%	14%	21%	36%	1%	9%	14%	25%	1%	5%	9%	16%	1%	3%	8%	12%	1%	4%	5%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	1	14	22		3	10	13		0	1	6		1	1	4		0	1	0					
	1%	18%	29%	48%	4%	13%	17%	34%	0%	1%	8%	9%	1%	1%	5%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	12	20		2	12	8		0	1	11		1	0	4		1	2	1		0	0	1	
	1%	16%	26%	43%	3%	16%	10%	29%	0%	1%	14%	16%	1%	0%	5%	6%	1%	3%	1%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	0	3		1	4	6		2	5	11		0	6	12		0	3	3		1	6	8		0	3	0	
	1%	0%	4%	6%	1%	6%	8%	15%	3%	7%	15%	25%	0%	8%	17%	25%	0%	4%	4%	8%	1%	8%	11%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	1	6	15		2	6	8		2	14	20		0	0	0		0	1	2					
	1%	8%	19%	29%	3%	8%	10%	21%	3%	18%	26%	47%	0%	0%	0%	0%	0%	1%	3%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	5	22	38		2	5	8		3	7	15		0	4	5		3	13	22		1	4	7		2	7	6	
	6%	29%	49%	84%	3%	6%	10%	19%	4%	9%	19%	32%	0%	5%	6%	12%	4%	17%	29%	49%	1%	5%	9%	16%	3%	9%	8%	19%

Question 10 *The study of education is a natural science*

Table 45:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	19	15	2		22	17	2																	
	25%	19%	3%	47%	29%	22%	3%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	4	6	0		11	10	1		22	12	2		4	4	1		0	0	0					
	5%	8%	0%	13%	14%	13%	1%	29%	29%	16%	3%	47%	5%	5%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	6	1		28	8	2		3	13	1		8	3	0		0	0	0					
	1%	8%	1%	11%	38%	11%	3%	51%	4%	18%	1%	23%	11%	4%	0%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	34	28	4		0	0	0		4	2	0		0	0	0		3	1	0		0	0	0	
	45%	37%	5%	87%	0%	0%	0%	0%	5%	3%	0%	8%	0%	0%	0%	0%	4%	1%	0%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	14	12	2		12	6	1		4	7	1		7	2	0		3	5	0		1	0	0	
	18%	16%	3%	36%	16%	8%	1%	25%	5%	9%	1%	16%	9%	3%	0%	12%	4%	6%	0%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	20	13	4		10	16	0		5	2	0		6	0	0		0	1	0					
	26%	17%	5%	48%	13%	21%	0%	34%	6%	3%	0%	9%	8%	0%	0%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	15	17	1		13	8	1		6	5	1		5	0	0		2	2	0		0	0	1	
	19%	22%	1%	43%	17%	10%	1%	29%	8%	6%	1%	16%	6%	0%	0%	6%	3%	3%	0%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	2	1	1		7	4	0		11	6	1		9	8	1		5	1	0		6	8	1		0	3	0	
	3%	1%	1%	6%	10%	6%	0%	15%	15%	8%	1%	25%	13%	11%	1%	25%	7%	1%	0%	8%	8%	11%	1%	21%	0%	4%	0%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	8	11	3		10	6	0		21	14	1		0	0	0		2	1	0					
	10%	14%	4%	29%	13%	8%	0%	21%	27%	18%	1%	47%	0%	0%	0%	0%	3%	1%	0%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	37	25	3		7	7	1		13	12	0		3	6	0		18	18	2		4	7	1		5	9	1	
	48%	32%	4%	84%	9%	9%	1%	19%	17%	16%	0%	32%	4%	8%	0%	12%	23%	23%	3%	49%	5%	9%	1%	16%	6%	12%	1%	19%

Question 11 *Knowledge and an understanding of social sciences is relevant to educational practice*

Table 46:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	3	14	19		2	16	23																	
	4%	18%	25%	47%	3%	21%	30%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	7	2		2	9	11		1	12	23		1	2	6		0	0	0					
	1%	9%	3%	13%	3%	12%	14%	29%	1%	16%	30%	47%	1%	3%	8%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	0	1	7		5	15	18		0	10	7		0	3	8		0	0	0					
	0%	1%	9%	11%	7%	20%	24%	51%	0%	14%	9%	23%	0%	4%	11%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	5	25	36		0	0	0		0	4	2		0	0	0		0	0	4		0	0	0	
	7%	33%	47%	87%	0%	0%	0%	0%	0%	5%	3%	8%	0%	0%	0%	0%	0%	0%	5%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	1	12	15		1	7	11		0	6	6		2	2	5		1	3	4		0	0	1	
	1%	16%	19%	36%	1%	9%	14%	25%	0%	8%	8%	16%	3%	3%	6%	12%	1%	4%	5%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	3	13	21		2	11	13		0	4	3		0	1	5		0	1	0					
	4%	17%	27%	48%	3%	14%	17%	34%	0%	5%	4%	9%	0%	1%	6%	8%	0%	1%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	2	16	15		1	10	11		0	2	10		1	0	4		1	2	1		0	0	1	
	3%	21%	19%	43%	1%	13%	14%	29%	0%	3%	13%	16%	1%	0%	5%	6%	1%	3%	1%	5%	0%	0%	1%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	0	3		0	6	5		0	4	14		2	4	12		1	3	2		1	10	4		0	1	2	
	1%	0%	4%	6%	0%	8%	7%	15%	0%	6%	19%	25%	3%	6%	17%	25%	1%	4%	3%	8%	1%	14%	6%	21%	0%	1%	3%	4%
Where Trained	HEI				School of Education				University Department				Correspondesce Course				Other							
	0	6	16		1	7	8		4	17	15		0	0	0		0	0	3					
	0%	8%	21%	29%	1%	9%	10%	21%	5%	22%	19%	47%	0%	0%	0%	0%	0%	0%	4%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	4	24	37		0	8	7		1	12	12		0	6	3		2	17	19		0	5	7		0	10	5	
	5%	31%	48%	84%	0%	10%	9%	19%	1%	16%	16%	32%	0%	8%	4%	12%	3%	22%	25%	49%	0%	6%	9%	16%	0%	13%	6%	19%

Question 12 *ITT courses should include the study of social sciences*

Table 47:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	6	16	14		6	13	22																	
	8%	21%	18%	47%	8%	17%	29%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	1	7	2		3	10	9		5	10	21		3	2	4		0	0	0					
	1%	9%	3%	13%	4%	13%	12%	29%	6%	13%	27%	47%	4%	3%	5%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	1	2	5		7	14	17		1	8	8		1	5	5		0	0	0					
	1%	3%	7%	11%	9%	19%	23%	51%	1%	11%	11%	23%	1%	7%	7%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	7	27	32		0	0	0		3	0	3		0	0	0		1	2	1		0	0	0	
	9%	36%	42%	87%	0%	0%	0%	0%	4%	0%	4%	8%	0%	0%	0%	0%	1%	3%	1%	5%	0%	0%	0%	0%
Length of Time in Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	3	12	13		3	7	9		2	4	6		3	3	3		1	3	4		0	0	1	
	4%	16%	17%	36%	4%	9%	12%	25%	3%	5%	8%	16%	4%	4%	4%	12%	1%	4%	5%	10%	0%	0%	1%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	4	12	21		6	11	9		1	4	2		0	2	4		1	0	0					
	5%	16%	27%	48%	8%	14%	12%	34%	1%	5%	3%	9%	0%	3%	5%	8%	1%	0%	0%	1%				
Length of Time in Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	5	17	11		3	9	10		2	0	10		1	2	2		1	1	2		0	0	1	
	6%	22%	14%	43%	4%	12%	13%	29%	3%	0%	13%	16%	1%	3%	3%	6%	1%	1%	3%	5%	0%	0%	1%	1%
Date Completed ITT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	1	0	3		2	4	5		1	6	11		3	5	10		2	3	1		1	10	4		0	1	2	
	1%	0%	4%	6%	3%	6%	7%	15%	1%	8%	15%	25%	4%	7%	14%	25%	3%	4%	1%	8%	1%	14%	6%	21%	0%	1%	3%	4%
Where Trained	HEI				School of Education				University Department				Correspondesce Course				Other							
	1	6	15		3	8	5		8	15	13		0	0	0		0	0	3					
	1%	8%	19%	29%	4%	10%	6%	21%	10%	19%	17%	47%	0%	0%	0%	0%	0%	0%	4%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	10	23	32		4	4	7		5	9	11		3	4	2		7	16	15		3	4	5		3	6	6	
	13%	30%	42%	84%	5%	5%	9%	19%	6%	12%	14%	32%	4%	5%	3%	12%	9%	21%	19%	49%	4%	5%	6%	16%	4%	8%	8%	19%

Question 13 *ITT should be school based*

Table 48:

Attributes	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total	1&2	3	4&5	Total
Gender	Male				Female																			
	17	9	10		10	18	13																	
	22%	12%	13%	47%	13%	23%	17%	53%																
Age	Under 30				Under 40				Under 50				Under 60				Over 60							
	4	3	3		4	11	7		15	9	12		4	4	1		0	0	0					
	5%	4%	4%	13%	5%	14%	9%	29%	19%	12%	16%	47%	5%	5%	1%	12%	0%	0%	0%	0%				
Qualifications	Cert Ed				PGCE				B Ed / Dip Ed				M Ed				Ph D							
	3	4	1		9	11	18		9	7	1		6	3	2		0	0	0					
	4%	5%	1%	11%	12%	15%	24%	51%	12%	9%	1%	23%	8%	4%	3%	15%	0%	0%	0%	0%				
Current Place of Employment	School				University				HEI				College of Education				School of Education				Other			
	23	21	22		0	0	0		1	4	1		0	0	0		2	2	0		0	0	0	
	30%	28%	29%	87%	0%	0%	0%	0%	1%	5%	1%	8%	0%	0%	0%	0%	3%	3%	0%	5%	0%	0%	0%	0%
Length of Time In Current Institution	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	9	11	8		5	7	7		3	5	4		4	3	2		5	1	2		1	0	0	
	12%	14%	10%	36%	6%	9%	9%	25%	4%	6%	5%	16%	5%	4%	3%	12%	6%	1%	3%	10%	1%	0%	0%	1%
Current Position	Teacher				Middle Manager				Senior Manager				Lecturer				Other							
	12	12	13		9	11	6		2	2	3		3	2	1		1	0	0					
	16%	16%	17%	48%	12%	14%	8%	34%	3%	3%	4%	9%	4%	3%	1%	8%	1%	0%	0%	1%				
Length of Time In Current Position	Less than 5 Years				5-9 Years				10-14 Years				15-19 Years				20-24 Years				Over 25 Years			
	8	13	12		8	7	7		5	4	3		3	2	0		2	1	1		1	0	0	
	10%	17%	16%	43%	10%	9%	9%	29%	6%	5%	4%	16%	4%	3%	0%	6%	3%	1%	1%	5%	1%	0%	0%	1%
Date Completed TT Course	1961-1965				1966-1970				1971-1975				1976-1980				1981-1985				1986-1990				1991-			
	2	1	1		6	3	2		6	5	7		6	7	5		2	2	2		4	6	5		1	1	1	
	3%	1%	1%	6%	8%	4%	3%	15%	8%	7%	10%	25%	8%	10%	7%	25%	3%	3%	3%	8%	6%	8%	7%	21%	1%	1%	1%	4%
Where Trained	HEI				School of Education				University Department				Correspondence Course				Other							
	7	13	2		7	5	4		11	9	16		0	0	0		2	0	1					
	9%	17%	3%	29%	9%	6%	5%	21%	14%	12%	21%	47%	0%	0%	0%	0%	3%	0%	1%	4%				
Desciptor	Educator				Educational Theorist				Educational Manager				Action Researcher				Teacher Educator				Educational Researcher				Student of Education			
	26	19	20		6	6	3		9	7	9		2	5	2		13	13	12		6	4	2		6	6	3	
	34%	25%	26%	84%	8%	8%	4%	19%	12%	9%	12%	32%	3%	6%	3%	12%	17%	17%	16%	49%	8%	5%	3%	16%	8%	8%	4%	19%

CHAPTER SEVEN

KEY ISSUES

INTRODUCTION

The analysis of data presented in the previous chapter described the study population's responses to research questions. This chapter will debate the key issues from the literature search (Chapters 1, 2 and 3).

THE RELATIONSHIP BETWEEN EDUCATIONAL THEORY, RESEARCH AND PRACTICE

The response to the questionnaire showed that the study population had limited experience (Tables 1-7) of educational theory and research in practice. However the majority of respondents agreed that educational theory is relevant to practice (Tables 8, 9, 24 and 29). The data also revealed that the study population believed that educational theory should be included in the ITT curriculum (Tables 10, 22 and 29). More specifically while the majority of the study population had not studied social sciences (Table 3) they agreed that social sciences (psychology, sociology and philosophy) should be included in the ITT curriculum (Tables 13 and 46). Generally there was a greater knowledge of educational theory from education graduates when compared with university graduates (Tables 1, 2, 3, 8, 13, 22, 34, 46 and 47).

The study of and participation in research questions served to illustrate the disparity between teacher research and educational research (Chapter 2). The data revealed that only a minority of education graduates had participated in educational research (Tables 6

and 7). In contrast the majority of the study population agreed that ITT courses should include the study of and participation in educational research (Tables 16, 18, 21, 23 and 24).

Perhaps the differences found in the data are a consequence of the respondents' understanding of educational research? The majority of the study population agreed that teachers participate in educational research upon entering the classroom (Table 30). However respondents also believed that teachers did not have time to participate in educational research (Table 31), and that educational researchers tended to be non-practitioners (Table 32). There was further confusion as to whether educational research was a science (Tables 33 and 45) or rooted in educational practice (Tables 33 and 44). Emerging from the respondents' bewilderment was a clear conviction that ITT courses should include the study of research (Table 21) and research documents (Table 23). This was further substantiated by the study population's belief that educational research is an extension of knowledge (Table 35).

DEVELOPMENT OF ITT COURSES

The practice of education and the practice of teaching emerged as disparate disciplines. Although respondents believed that educational theory and research should relate to practice (Tables 8 and 24) they could not determine how this could happen in practice. To illustrate this point defining the content of ITT courses proved problematic. While the study population considered that educational theory and research should be included in ITT courses there was disagreement as to whether ITT courses should be school based (Tables 11, 28 and 48). There was full agreement with the statement, ITT courses should prepare students to teach (Table 20). The fundamental difficulties were how,

where, and by whom. The respondents agreed that; teaching is a skill (Table 36), an art (Table 37), and that teachers learn to teach (Table 38). However there was also a significant proportion of respondents (34%) who believed that teachers are 'born and not made' (Table 39). Given the imbalance of responses to the statements it is unclear how the inclusion of educational theory and research in ITT courses would relate to practice.

There was also confusion as to which body should determine/define the content of ITT courses (Tables 15 and 19). If as Table 19 illustrated the Government should be responsible, how would this be received? The majority of respondents believed that the Government has initiated a series of changes which will have a long term detrimental effect on those participating in the educational process (Table 26). Whatever the outcome the study population agreed that ITT courses should include the practice of teaching (Tables 17, 25, 38 and 42). Collaboration between schools, colleges of education, university departments and the Government would assist the process of developing a suitable ITT curriculum for student teachers.

As a consequence of the Government's ITT policy there is to be a greater emphasis on practice and a reduction of theoretical courses (Chapter 3). The study population may agree with the rationale which preceded the policy (Tables 1-7) they would disagree with its content. Where there appears to be agreement between the Government's Blue Paper (DFE, 1993) and the study population is in their determination to encourage good practice. In contrast to the Government, respondents believed that existing ITT courses contribute to good practice in secondary schools (Table 43). Research into existing good practice could therefore be developed in order to provide a framework for future ITT courses. Alternatively the current ITT policy directed by the Government may cause

in the devaluation of the status of teachers by devaluing their training.

THE EMERGING RELATIONSHIP BETWEEN EDUCATIONAL THEORY, RESEARCH AND PRACTICE

This research has shown that in practice the relationship between theory, research and practice may seem tenuous. However knowledge emanating from theory, research and practice provides individuals with the status to teach others. The study population agreed that learning to teach requires the process of acquiring knowledge (Tables 40 and 41). To divorce theory from practice is not possible (Chapters 1 and 2) although within the context of education to relate practice to theory is difficult.

The respondents who agreed that they participated in educational research upon entering the classroom (Table 30) also stated that educational researchers tend to be non-practitioners (Table 32). A possible solution to the contradictions which appear within education is critical theory (Chapters 1 and 2). Critical theory determines that individuals participate in their own research through analysis of the process of change. The study population would have difficulty engaging in this practice as their experience of research is limited (Tables 6 and 7). This leads to the possible conclusion that knowledge of research is as relevant to practice in education as practice itself. Research should be an everyday activity. Student teachers should, as the respondents agreed, participate in research (Tables 20 and 21). However the culture of research differs from the culture of practice, as revealed in the study population's response to theoretical questions (Tables 34 and 45).

ACTION RESEARCH - COLLABORATION BETWEEN THEORY AND PRACTICE?

The methodology of action research was conceived to accommodate the practitioner in the field. Critical theory provided the premise on which action research is based. Having established the tools of research action researchers considered their craft to be the emancipation of teachers (Whitehead, 1989). However if the study population are exemplars of the emancipated teacher their understanding and experience of action research is extremely limited (Tables 6 and 7). The respondents had not connected research in the classroom (Table 30) to educational research (Tables 31 and 32). Evidence of the disparity between action research in theory, and action research in practice would appear to exist. Perhaps the difficulty of understanding the scientific premise on which quantitative research is based is paralleled in the study population's understanding of action research (Tables 6, 7, 30, 31, 32 and 33).

The problems generated by the emerging discipline of action research are compounded by the methodological differences which remain unresolved (Chapters 1 and 2). If the multifaceted aspects of qualitative research are to be practised successfully, then a fuller understanding of the process and its context is required. The related knowledge of the researcher and practitioner, if combined, would produce results currently unknown to education. The Blue Paper (DFE, 1993) stated a desire for teachers to continue their education and development throughout their working life, research should be included within this programme. The study population agreed that knowledge of theory and research should be included in the ITT curriculum (Tables 10, 16, 17 and 18). Equally knowledge and experience of educational practice in schools should be a prerequisite to educational research and theory.

CHAPTER EIGHT

CONCLUSION AND RECOMMENDATIONS

CONCLUSION

The unfolding thesis of this dissertation can be summarised as follows:

> ***While teachers considered educational theory and research to be relevant to practice, a paradox emerged between their training and their beliefs.***

This study found that teachers have little understanding of the nature of educational theory and research, or of its role in ITT. However teachers believe that theory and research is essential to educational practice and should be an important component of ITT. Where teachers had experience of educational theory and research this was of little use to educational practice. Paradoxically teachers believed that educational theory and research were important. This leads to the conclusion that if ITT is to be school-based, schools could not offer educational theory and research.

To elaborate, the study population's experience of educational theory and research appeared to be limited and generated a negative response to questions regarding their training. More specifically, respondents who had trained in university departments appeared to have less knowledge of educational issues than those trained in colleges of education. Whilst the study population agreed that teaching requires knowledge of

education, it would appear that many respondents only had a limited understanding of education. In contrast to their own experience, the study population agreed that educational theory and research should be included in the ITT curriculum. Given the changes to ITT policy the development of the relationship between educational theory, research and practice would need to be reviewed.

The study population could not define educational research, respondents seemed confused as to whether teachers could research their own practice. Significantly, the study population considered educational researchers to be non-practitioners. The majority of respondents had not participated in educational research. Research and teaching emerged as disparate disciplines. However the study population agreed that student teachers should participate in educational research. Respondents appeared to encourage an understanding of research by practitioners.

As the culture of research differs from the culture of practice changes to research practices would be required to accommodate teachers. Whilst educational research is an everyday activity it has adopted scientific language and, as a result, methodological issues remain unresolved and educational research practices distance the researcher from the population being studied. The writer considers that in order to develop a greater understanding of education researchers should engage teachers in the research process.

The study population also lacked an understanding of action research. Teachers were unable to participate in action research programmes because they were not equipped with the necessary tools and mechanisms. If action research is to be practised successfully in schools, a fuller understanding of the relevant knowledge would be

required by teachers.

The flaw in action research methodology is the principle that the way you teach is the way you see. The researcher as a teacher has a limited knowledge and understanding of the research process. The majority of researchers are non-practitioners. As science moves towards a more holistic approach educational research continues to generate theory in isolation from practice. If teachers are to become researchers many of the problems encountered by action researchers would need to be resolved.

Education is concerned with the development of the individual from birth. The practice of educating others is not in the exclusive domain of teachers. The study population agreed that teaching is a skill and an art, and that teachers learn to teach. A minority of teachers also believed that teachers are 'born and not made'. The study population was confused as to whether education was rooted in practice or science. At a fundamental level respondents had a lack of understanding of their own practice. The professional development of teachers should be extended to include an understanding of educational theory, research and practice.

The understanding of teaching by practitioners is at the core of the ITT curriculum. The study population agreed that ITT contributed to good practice in schools. The content of the ITT curriculum is critical to the development of the relationship between educational theory, research and practice. Changes to ITT policy as directed by the Government have compounded the study population's confusion concerning the application of theory and research to practice. Teachers have not participated in the process of developing the ITT policy, as a consequence teachers lack an understanding

of the ideological premise for the change. The socio-political factors influencing ITT should be considered in further studies concerning the relationship between educational theory, research and practice.

Further, respondents considered that the Government's changes to education were also detrimental to practice. The writer suggests that changes to the ITT curriculum should reflect the needs of the teacher. Fundamentally the study population agreed that ITT should prepare teachers to teach. Although respondents were undecided as to whether ITT should be school or HEI based they agreed that the ITT curriculum should include educational theory and research. If teachers are unable to deliver such courses a possible consequence would be the devaluation of ITT. While there is growing concern among teachers as to the status of teaching as a profession, teachers need to collaborate with teacher educators to improve practice.

In response to the study question this dissertation has found that, from a teacher's perspective, educational theory and research are relevant to secondary school practice. However, educational theory, research and practice are disparate disciplines with their own language and culture. Significantly, the language and culture of research isolates the practitioner from participation in educational research. Knowledge of each discipline is required by the teacher to develop an understanding of education.

The policy to reduce theoretical and research elements in ITT courses contradicts the results of this study. Practitioners agreed that participation in educational theory and research are required to understand practice. Knowledge is fundamental to education, *knowing how to know* is critical to developing an understanding of educational practice.

If educational theory and research are relevant to practice in secondary schools, collaboration between theorists, researchers and practitioners is required to generate a mutual understanding of education.

In conclusion, this research has established that the relationship between educational theory, research and practice is more readily identified in theory than in practice. Borrowing from the natural and social sciences has created disparate disciplines within the field of education. The writer believes that education should generate its own theory and research practices. The cultures of research and practice should be subsumed into the culture of education. Development of a knowledge base for education is critical to the development of research and practice.

RECOMMENDATIONS

This study concludes that knowledge of educational theory and research is required by practitioners. The paradox between teachers' understanding of educational theory and research, and their belief in its relevance to practice may then be resolved. This dissertation is an introduction to a difficult area of investigation, its purpose has been to generate further research.

The writer recommends that several issues should be considered as the basis for further study. These focus on ITT and fall into two categories; qualitative research and policy research, each has its own methodology. In essence qualitative research would examine what is happening in the field, while policy research would examine areas of influence determining the ITT curriculum. Both qualitative and policy research should, through interviews and observation, engage practitioners in the research process. The following

issues could set the parameters for this research:

Qualitative Research - Practice

Why are educational theory and research important?

Should teachers have an understanding of educational theory and research?

Do teachers have sufficient knowledge and understanding of educational theory and research to improve practice?

Is educational theory and research of use to practice? Why?

What are the differences between college of education graduates and university graduates in their understanding of educational theory, research and practice?

Policy

Who should determine/define ITT? Why?

Should ITT be school-based or HEI-based?

Is teacher training in schools effective?

Should ITT include educational theory and research? Why?

What are the socio-political factors influencing ITT?

It is hoped that this study (regarded as a pilot study) will lead to an extended study of the key issues raised. The writer envisages that due to the complexity of this area of research applications for grants will focus on two separate but related studies. The approach to investigating practice will encompass observation, field studies and interviews. The approach to policy research will encompass case studies of key players within ITT.

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APPENDICES

1. Questionnaire Phase I

2. Letter of Introduction

3. Questionnaire Phase II

4. Letter of Introduction

5. Questionnaire Phase III

6. Questionnaire - Section A: Theory Research and Practice
   Part 1: Formal Study of Education Theory and Education Research

7. Questionnaire - Section A: Theory Research and Practice
   Part 2: Initial Teacher Training (ITT) - Relationship between Theory and Practice

8. Questionnaire - Section B: Views on Educational Issues

9. Questionnaire - Section C: The Nature of Teaching as an Educational Process

10. Questionnaire - Section D: Attributes

11. Questionnaire - Survey/Distribution

12. Questionnaire - Introduction

13. Letter of Introduction

APPENDIX 1

Questionnaire

Start Time:
Completed:

Number:
Date:

The Relationship between Educational Research, Theory and Practice - A Teacher's Perspective.

Thank you for participating in this research.

Completed copies will be collected by the researcher:

Time: Date:

Ref: SB Nov93/1

Introduction

1.1 Education in England and Wales has changed in the last decade. The source of the changes has been government initiatives which have encompassed all aspects of education from primary to postgraduate degrees. Central to this research are the changes taking place in Initial Teacher Education. Briefly the government proposed this school-based schemes as alternatives to existing routes into teaching, the licensed teacher scheme and Articled Teacher Scheme. Either route would bypass any in-depth study of educational theory and preparation for educational research.

1.2 As a teacher engaged in educational research it is evident that with the exception of practitioner research, educational theory, educational research and pedagogy are disparate disciplines. If each is to contribute to education per se there is a need for greater awareness of the tools, mechanisms, practices and culture of each discipline. The current climate of uninhibited change is forcing those engaged in education to reflect on their own practice. Whilst reflecting would it not be pertinent to look to the future, broaden the horizon and encompass other areas of educational knowledge and experience?

1.3 The focus of this research is the relationship between theory, research and practice within secondary education. In essence the researcher is interested in the relationship between educational research and practice. If education is concerned with developing the autonomy of the individual then educational research should contribute to this process. The nature of knowledge and its acquisition should provide the parameters in which pedagogic practice is experienced. An understanding of how knowledge is gained should be fundamental to the practitioner in the classroom. How epistemology, ontology and methodology remain in the domain of the researcher not teacher.

1.4 Information generated from this research will:

- be of importance, not least because it is based on the experience, knowledge and beliefs of practising teachers, L.E.A. advisors and teacher educators.
- inform those engaged in educational theory, educational research and educational practice.
- be written from a teacher's perspective.

1.5 All respondents will remain anonymous. Confidentiality is essential to the success of this research.

Thank you for agreeing to participate in this research. Your views are relevant and will be treated with the utmost respect.

A copy of this research will be available, on completion, at the University of Bristol - School of Education Library.

SECTION A

Part 1

- Studied = followed a course at undergraduate level.
- Your responses should relate to the following:

a) Length of course/period of research.

1 = Not at all
2 = 1 academic term
3 = 2 academic terms
4 = 3 academic terms
5 = Do not know

b) Whether, or not, theoretical courses were relevant to educational practice.

1 = Not at all
2 = Under 50% was relevant
3 = Over 50% was relevant
4 = The whole course was relevant
5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		1	2	3	4	5
1	I have studied educational theory *The course was relevant to educational practice*					
2	I have studied educational psychology *The course was relevant to educational practice*					
3	I have studied the sociology of education *The course was relevant to educational practice*					
4	I have studied the philosophy of education *The course was relevant to educational practice*					

5	I have studied curriculum development *The course was relevant to educational practice*					
6	I have studied educational research *The course was relevant to educational practice*					
7	I have participate in educational research *The educational research was relevant to educational practice*					
8	I have administered educational research *The educational research was relevant to educational practice*					
9	I have participate in action research *The action research was relevant to educational practice*					

Part 2

- Your responses should relate to the following:
  - 1 = Disagree completely
  - 2 = Disagree, in part
  - 3 = Agree, in part
  - 4 = Agree completely
  - 5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		1	2	3	4	5
10	There is a relationship between educational theory and practice					
11	There is a relationship between educational research and practice					
12	The study of educational theory is relevant to teacher training courses					
13	Teacher training courses should include the study of educational theory					
14	Educational theory should be taught before teaching practice on teacher training courses					
15	Teacher training should be school based					
16	The training of teachers should be the same for all student teachers					
17	Teacher training courses should include the study of the social sciences, i.e. psychology, sociology, philosophy					
18	Teacher training courses should include the study of curriculum development					
19	The training of teachers should be determined by Institutes of Higher Education					
20	Teacher training courses should include an introduction to educational research methodologies					
21	Teacher training courses should include the study of action research					
22	All teacher training courses should include a detailed evaluation of educational practice					
23	All teacher training students should participate in educational research					
24	The Department for Education should define the content of teacher training courses					
25	Teacher training courses should prepare students to teach					
26	Teacher training courses should prepare students to participate in educational research					
27	Teacher training courses should include an introduction to educational theory and its relationship to educational practice					
28	Teacher training courses should include the study of educational research documents					
29	There is a relationship between educational practice and educational research					
30	There is a relationship between educational theory and educational research					
31	No training is required for teachers					

SECTION B

Which statement do you agree with (a) or (b) ? Why do you agree with this statement ?
Delete the statement you disagree with ?

Question 1 (a) The government has initiated a series of changes which will have an everlasting detrimental effect on those participating in the educational process as managers, providers or consumers.

(b) The government has initiated a series of changes which will have an everlasting positive effect on those participating in the educational process as managers, providers or consumers.

I do not know ☐

I agree with statement (a) / (b) because

Question 2 (a) Educational theorists 'sit in ivory towers' without any contact with 'real' people.

(b) Educational theorists determine policies relevant to education in practice.

I do not know ☐

I agree with statement (a) / (b) because

Question 3 (a) Only teachers in schools can train teachers for schools.

(b) Teacher educators are required for the training of teachers.

I do not know ☐

I agree with statement (a) / (b) because

Question 4 (a) Understanding educational theory is a prerequisite to good practice.
(b) Understanding educational theory is not relevant to good practice.

I do not know ☐

I agree with statement (a) / (b) because

Question 5 (a) Teachers do not have time to participate in educational research.
(b) Teachers participate in educational research upon entering the classroom.

I do not know ☐

I agree with statement (a) / (b) because

Question 6 (a) Research methods in education are firmly rooted in scientific practice.
(b) Research methods in education are firmly rooted in educational practice.

I do not know ☐

I agree with statement (a) / (b) because

Question 7 (a) Educational researchers are non-practitioners.
(b) Educational practitioners are not researchers.

I do not know ☐

I agree with statement (a) / (b) because

Question 8 (a) Educational theory is aimed at organising and explaining <u>specific</u> aspects of the educational environment.

(b) Education theory is a series of <u>generalisations</u> by which we attempt to explain some phenomena in a systematic manner.

I do not know ☐

I agree with statement (a) / (b) because

Question 9 (a) Educational research is an extension of knowledge.

(b) Educational research is a fraud.

I do not know ☐

I agree with statement (a) / (b) because

Question 10 (a) Education is concerned with the development of individual autonomy.

(b) Education is concerned with the continuation of society.

I do not know ☐

I agree with statement (a) / (b) because

SECTION C

- Your response should relate to the following:
  - 1 = Disagree completely
  - 2 = Disagree, in part
  - 3 = Agree, in part
  - 4 = Agree completely
  - 5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		1	2	3	4	5
1	Teaching is a skill					
2	Teaching is an art					
3	Teachers learn to teach					
4	Teachers are 'born and not made'					
5	Learning to teach is the process of acquiring knowledge					
6	Learning is the process of acquiring knowledge					
7	Knowledge of teaching is acquired through practice					
8	Teacher training courses determine good practice in secondary schools					
9	Knowledge of educational theory is relevant to educational practice in secondary schools					
10	Educational theory is a discrete discipline					
11	Educational research generates theory					
12	Educational research determines good practice in secondary schools					
13	Secondary school teachers are educational researchers in practice					
14	Teachers should engage in educational research					
15	Educational research is a social science					
16	The study of education is a natural science					
17	Knowledge and an understanding of the social sciences is relevant to educational practice					
18	Teacher training courses should include the study of social sciences					
19	Teacher training courses should be school based					
20	Teachers should train teachers					

SECTION D

PLEASE TICK YOUR RESPONSE

1 Sex — Male ☐ Female ☐

2 Age

Under 25	☐	26-30	☐
31-35	☐	36-40	☐
41-45	☐	46-50	☐
51-55	☐	56-60	☐
61-65	☐	Over 65	☐

3 Qualifications

Cert.Ed.	☐	Dip.Ed.	☐
P.G.C.E.	☐	B.Ed.	☐
B.A.	☐	B.Sc.	☐
B.Hum.	☐	B.Mus.	☐
M.A.	☐	M.Ed.	☐
M.Phil.	☐	M.Sc.	☐
Ph.D.	☐	Other	☐

4 Current place of employment

School	☐	College of Education	☐
University Department	☐	School of Education	☐
Other	☐		

5 Length of time in current institution ☐ Yrs ☐ Months

6 Current position

Teacher	☐	Lecturer	☐
Middle Manager	☐	Senior Manager	☐
Other	☐		

7 Length of time in current position ☐ Yrs ☐ Months

8 In what year did you complete a teacher training course. (Leave blank if you have not completed a course) ☐

9 Where did you train

Higher Education College	☐	University Department	☐
School of Education	☐	Other	☐

10 Please tick all the following descriptors that apply to you

Educator	☐	Teacher Educator	☐
Educational Theorist	☐	Educational Researcher	☐
Educational Manager	☐	Student of Education	☐
Action Researcher	☐		

- THANK YOU FOR COMPLETING THIS QUESTIONNAIRE
- Phase 1 - Please turn over.

THE QUESTIONNAIRE

Thank you for completing this questionnaire. The design of this questionnaire is developed in four phases.

Phase 1	Draft 1
Phase 2	Pilot Study - Evaluation
Phase 3	Draft 2
Phase 4	**Questionnaire**

This is Phase 1 (Draft 1). To assist with the development of the questionnaire please complete the following:

PLEASE TICK YOUR RESPONSE

1 <u>Presentation</u>

a) Is the type
- acceptable ☐
- too big ☐
- too small ☐

b) Are the questions spaced out sufficiently ?
- yes ☐
- bigger gaps ☐
- smaller gaps ☐

c) The quality of presentation is
- acceptable ☐
- could be improved ☐

2 <u>Questions</u>

a)Did you understand each statement ?
- yes ☐
- no ☐

If no, please list unclear statements

b) Did you understand each response (grid) ?
- yes ☐
- no ☐

If no, please list unclear statements

c) Did the statements and responses relate to the central issue(s) - The relationship between educational theory and research to educational practice ?
- yes ☐
- no ☐

If no, please list unclear statements

3 <u>Introduction</u>

a) Was the introduction to this document clear ?
- yes ☐
- no ☐

If no please mark <u>on the copy</u> any section which is unclear

4 <u>Questionnaire</u>

a) Is the length of the questionnaire
- acceptable ☐
- too long ☐
- too short ☐

b) Do you consider this questionnaire to be a relevant piece of educational research ?
- yes ☐

no

If no, why?

c) Do you think all educational questionnaires are not relevant to educational practice ?

yes

no

If no, please comment

5 Research

a) Would you be willing to participate in a later phase of this research ?

yes

no

b)Would you be interested in receiving the results of this phase of the questionnaire ?

yes

no

c) Would you be interested in receiving a copy of the Questionnaire ?

THANK YOU FOR PARTICIPATING IN THIS RESEARCH. YOUR TIME AND COMMENTS ARE VALUED BY THE INVESTIGATOR.

Questionnaire distribution

Phase I	Hengrove School colleagues Music - advisory teacher P.E. - advisory teacher Sec. Sector advisor - AVON Sec. Teacher Educators - University of Bristol Sec. Teacher Educators - GLOSCAT
Phase II 'Pilot Study'	Devizes School (All Staff) Avon advisory teachers Teacher educators - GLOSCAT
Phase III	Repeat Phase I
Phase IV	King Edward's School (Independent) Wiltshire Comprehensives (2 off) Avon Comprehensives (2 off) University of Reading - School of Education Bath College of Higher Education University of Bristol

<u>Method</u>

Phases I/II	Investigator in person
Phases III/IV	Postal survey

APPENDIX 2

Hazelbury Cottage
Hazelbury Hill
Box
Wiltshire
SN14 9LB

24th January 1994

Dear Respondent,

The enclosed questionnaire will, in part, form the basis of research into Initial Teacher Training. As a teacher (secondary) my aim is to present an overview of the relationship between theory, practice and research from a teacher's perspective.

I value your participation in this research, thank you for your assistance with my work.

Best wishes,

Yours sincerely,

Sonia Blandford

University of Bristol - Ed.D

APPENDIX 3

Questionnaire

The Relationship between Educational Research, Theory and Practice
- A Teacher's Perspective.

- The focus of this research is the relationship between theory, research and practice within secondary education.

- Information generated from this research will:

  - be of importance, not least because it is based on the experience, knowledge and beliefs of practising teachers, L.E.A. advisors and teacher educators.
  - inform those engaged in educational theory, educational research and educational practice.
  - be written from a teacher's perspective.

- All respondents will remain anonymous. Confidentiality is essential to the success of this research.

- Thank you for agreeing to participate in this research. Your views are relevant and will be treated with the utmost respect.

- A copy of this research will be available, on completion, at the University of Bristol - School of Education Library.

Please note start time:
time completed:

Completed copies will be:

Date issued: Date collected:

Ref: SB Jan94/2

SECTION A

Part 1

- (a) Your responses should relate to the period of study:
  - 1 = Not at all
  - 2 = 12 weeks
  - 3 = 24 weeks
  - 4 = 36 weeks
  - 5 = Do not know

(b) Whether, or not, you consider that the theoretical courses were relevant to educational practice.
- 1 = Not at all
- 2 = Very little of the course was relevant
- 3 = Most, but not all of the course was relevant
- 4 = The whole course was relevant
- 5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		1	2	3	4	5
1a)	I have studied educational theory					
b)	*The course was relevant to educational practice*					
2a)	I have studied educational psychology					
b)	*The course was relevant to educational practice*					
3a)	I have studied the sociology of education					
b)	*The course was relevant to educational practice*					
4a)	I have studied the philosophy of education					
b)	*The course was relevant to educational practice*					
5a)	I have studied curriculum development					
b)	*The course was relevant to educational practice*					
6a)	I have studied educational research					
b)	*The course was relevant to educational practice*					
7a)	I have participated in educational research					
b)	*The educational research was relevant to educational practice*					
8a)	I have administered educational research					
b)	*The educational research was relevant to educational practice*					
9a)	I have participated in action research					
b)	*The action research was relevant to educational practice*					

Part 2

- Your responses should relate to the following:
  - 1 = Disagree completely
  - 2 = Disagree, in part
  - 3 = Agree, in part
  - 4 = Agree completely
  - 5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		1	2	3	4	5
10	There is a relationship between educational theory and practice					
11	The study of educational theory is relevant to initial teacher training courses					
12	Educational theory should be taught before teaching practice on intital teacher training courses					
13	Initial teacher training should be school based					
14	The training of teachers should be the same for all student teachers					
15	Initial teacher training courses should include the study of the social sciences					
16	Initial teacher training courses should include the study of curriculum development					
17	The training of teachers should be determined by Institutes of Higher Education					
18	Initial teacher training courses should include the study of action research					
19	All initial teacher training courses should include a detailed evaluation of educational practice					
20	All initial teacher training students should participate in educational research					
21	The Department for Education should define the content of initial teacher training courses					
22	Initial teacher training courses should prepare students to teach					
23	Initial teacher training courses should prepare students to participate in educational research					
24	Initial teacher training courses should include an introduction to educational theory and its relationship to educational practice					
25	Initial teacher training courses should include the study of educational research documents					
26	There is a relationship between educational practice and educational research					
27	No training is required for teachers					

SECTION B

Do you agree with following statements ?
Indicate your position on the bipolar scale with a cross, i.e. do you strongly disagree . . . . . strongly agree, or agree with (a) or (b) or both.

1 The government has initiated a series of changes which will have an everlasting detrimental effect on those participating in the educational process as managers, providers or consumers.

Strongly disagree . . . . . Strongly agree

2 a) Educational theorists 'sit in ivory towers' without any contact with 'real' people.
b) Educational theorists determine policies relevant to education in practice.

(a) . . . . . (b)

3 a) Only teachers in schools can train teachers for schools.
b) Teacher educators are required for the training of teachers.

(a) . . . . . (b)

4 a) Understanding educational theory is a prerequisite to good practice.
b) Understanding educational theory is not relevant to good practice.

(a) . . . . . (b)

5 Teachers participate in educational research upon entering the classroom.

Strongly disagree . . . . . Strongly agree

6 Teachers do not have time to participate in educational research.

Strongly disagree . . . . . Strongly agree

7 Educational researchers are non-practitioners.

Strongly disagree . . . . . Strongly agree

8 a) Research methods in education are firmly rooted in scientific practice.
b) Research methods in education are firmly rooted in educational practice.

(a) . . . . . (b)

9 a) Educational theory is aimed at organising and explaining <u>specific</u> spects of the educational environment.
b) Educational theory is a series of <u>generalisations</u> by which we attempt to explain some phenomena in a systematic manner.

(a) . . . . . (b)

10 a) Educational research is an extension of knowledge.
b) Educational research is a fraud.

(a) . . . . . (b)

SECTION C

Do you agree with following statements ?
Indicate your position on the bipolar scale with a cross indicating whether, or not, you strongly disagree or agree with each statement.

		Strongly Disagree . . . . . Strongly Agree
1	Teaching is a skill	. . . . .
2	Teaching is an art	. . . . .
3	Teachers learn to teach	. . . . .
4	Teachers are 'born and not made'	. . . . .
5	Learning to teach is the process of acquiring knowledge	. . . . .
6	Learning is the process of acquiring knowledge	. . . . .
7	Knowledge of teaching is acquired through practice	. . . . .
8	Initial teacher training courses determine good practice in secondary schools	. . . . .
9	Educational research is a social science	. . . . .
10	The study of education is a natural science	. . . . .
11	Knowledge and an understanding of social sciences is relevant to educational practice	. . . . .
12	Initial teacher training courses should include the study of social sciences	. . . . .
13	Initial teacher training courses should be school based	. . . . .

SECTION D

PLEASE TICK YOUR RESPONSE

1	Sex	Male	☐	Female	☐	
2	Age	Under 25	☐	26-30	☐	
		31-35	☐	36-40	☐	
		41-45	☐	46-50	☐	
		51-55	☐	56-60	☐	
		61-65	☐	Over 65	☐	
3	Qualifications	Cert.Ed.	☐	Dip.Ed.	☐	
		P.G.C.E.	☐	B.Ed.	☐	
		B.A.	☐	B.Sc.	☐	
		B.Hum.	☐	B.Mus.	☐	
		M.A.	☐	M.Ed.	☐	
		M.Phil.	☐	M.Sc.	☐	
		Ph.D.	☐	Other	☐	
4	Current place of employment	School	☐	College of Education	☐	
		University Department	☐	School of Education	☐	
		Higher Education College	☐	Other	☐	
5	Length of time in current institution		☐	Yrs	☐	Months
6	Current position	Teacher	☐	Lecturer	☐	
		Middle Manager	☐	Senior Manager	☐	
		Other	☐			
7	Length of time in current position		☐	Yrs	☐	Months
8	In what year did you complete a teacher training course. *(Leave blank if you have not completed a course)*		☐			
9	Where did you train ?	Higher Education College	☐	University Department	☐	
		School of Education	☐	Correspondence Course	☐	
		Other	☐			
10	Please tick all the following descriptors that apply to you	Educator	☐	Teacher Educator	☐	
		Educational Theorist	☐	Educational Researcher	☐	
		Educational Manager	☐	Student of Education	☐	
		Action Researcher	☐			

- THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.
- Please fill in finishing time on the front cover:
- Phase 2 - Please turn over.

THE QUESTIONNAIRE

Thank you for completing this questionnaire. The design of this questionnaire is developed in four phases.

Phase 1	Draft 1
Phase 2	**PILOT STUDY - EVALUATION**
Phase 3	Draft 2
Phase 4	**Questionnaire**

This is Phase 2 (PILOT STUDY). To assist with the development of the questionnaire please complete the following:

1 Presentation

a) Is the type

- acceptable
- too big
- too small

b) Are the questions spaced out sufficiently ?

- yes
- bigger gaps
- smaller gaps

c) The quality of presentation is

- acceptable
- could be improved

2 Introduction

a) Was the introduction clear ?

- yes
- no

If no please mark on the copy any section which is unclear

3 Questions

a)Did you understand each statement ?

- yes
- no

If no, please list unclear statements

b) Did you understand each response (grid)?

- yes
- no

If no, please list unclear statements

c) Did the statements relate to the central issue(s) - The relationship between educational theory and research to educational practice ?

- yes
- no

If no, please list unclear statements

4 Questionnaire

a) Is the length of the questionnaire

- acceptable
- too long
- too short

b) Do you consider this questionnaire to be a relevant piece of educational research ?

- yes
- no

If no, why?

5 Research

a) Would you be willing to participate in a later phase of this research ?

b)Would you be interested in receiving the results of this phase of the questionnaire ?

c) Would you be interested in receiving a copy of the **Questionnaire** ?

THANK YOU FOR PARTICIPATING IN THIS RESEARCH.
I VALUE YOUR TIME AND COMMENTS.

Questionnaire distribution

Phase I	Hengrove School colleagues Music - advisory teacher P.E. - advisory teacher Sec. Sector advisor - AVON Sec. Teacher Educators - University of Bristol Sec. Teacher Educators - CGCHE
Phase II 'Pilot Study'	Devizes School (All Staff) Avon advisory teachers Teacher educators - CGCHE
Phase III	Repeat Phase I
Phase IV	King Edward's School (Independent) Wiltshire Comprehensives (2) Avon Comprehensives (2) University of Reading - School of Education Bath College of Higher Education University of Bristol

<u>Method</u>

Phases I/II	Investigator in person
Phases III/IV	Postal survey

APPENDIX 4

Hazelbury Cottage
Hazelbury Hill
Box
Wiltshire
SN14 9LB

25th April 1994

Dear Respondent,

The enclosed questionnaire will, in part, form the basis of research into Initial Teacher Training. As a teacher (secondary) my aim is to present an overview of the relationship between theory, practice and research from a teacher's perspective.

I value your participation in this research, thank you for your assistance with my work.

Best wishes,

Yours sincerely,

Sonia Blandford
University of Bristol - Ed.D

APPENDIX 5

Questionnaire

The Relationship between Educational Research, Theory and Practice in Secondary Schools - A Teacher's Perspective.

- Thank you for agreeing to participate in this research.

- Your views are relevant and will be treated with the utmost respect.

- If you wish to add written comment to amplify your views, please do so in the space provided.

- Information generated from this research will:

  - be of importance, not least because it is based on the experience, knowledge and beliefs of practising teachers, L.E.A. advisors and teacher educators.
  - inform those engaged in educational theory, educational research and educational practice.
  - be written from a teacher's perspective.

- A copy of this research will be available, on *completion*, at the University of Bristol - School of Education Library.

Please note Time started:
Time completed:

Completed copies will be:

Date issued:
Date collected:

Ref: SB April 94/3

SECTION A - THEORY, RESEARCH AND PRACTICE

Part 1: Formal study of education theory and education research

Your responses should relate to when you studied education theory/ education research:

Please indicate the course title - e.g. Cert.Ed. / B. Ed. / P.G.C.E.

(a) Please indicate the length of the period of study for each element of the course, e.g. sociology, curriculum.

1 = Not at all
2 = 12 weeks
3 = 24 weeks
4 = 36 weeks
5 = Do not know

(b) Please indicate whether, or not, you consider that the theoretical elements were relevant to educational practice.

1 = Not at all
2 = Very little of the course was relevant
3 = Most, but not all of the course was relevant
4 = The whole course was relevant
5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		Cert Ed	B Ed	PGCE	Master PhD	1	2	3	4	5
1a)	I have studied educational theory									
b)	*The educational theory course was relevant to educational practice*									
2a)	I have studied educational psychology									
b)	*The educational theory course was relevant to educational practice*									
3a)	I have studied the sociology of education									
b)	*The educational theory course was relevant to educational practice*									
4a)	I have studied the philosophy of education									
b)	*The educational theory course was relevant to educational practice*									
5a)	I have studied curriculum development									
b)	*The educational theory course was relevant to educational practice*									
6a)	I have studied educational research									
b)	*The educational theory course was relevant to educational practice*									
7a)	I have participated in educational research									
b)	*The educational research was relevant to educational practice*									
8a)	I have administered educational research									
b)	*The educational research was relevant to educational practice*									
9a)	I have participated in action research									
b)	*The action research was relevant to educational practice*									

Please add comments (if you wish to qualify your response) on facing page

SECTION A - THEORY, RESEARCH AND PRACTICE

Part 2: Initial Teacher Training (ITT) - relationship between theory and practice

Your responses should relate to the following:

1 = Disagree completely
2 = Disagree, in part
3 = Agree, in part
4 = Agree completely
5 = Do not know

PLEASE TICK YOUR RESPONSE. THANK YOU.

		1	2	3	4	5
10	There should be a relationship between educational theory and practice					
11	The study of educational theory is relevant to ITT courses					
12	Educational theory should be taught before teaching practice but after a period of observation on ITT courses					
13	ITT should be school based at secondary schools					
14	The training of teachers should be the same for all student teachers					
15	ITT courses should include the study of the social sciences					
16	ITT courses should include the study of curriculum development					
17	The training of teachers should be determined by Institutes of Higher Education					
18	ITT courses should include the study of action research					
19	All ITT courses should include a detailed evaluation of educational practice					
20	All ITT students should participate in educational research					
21	The Department for Education should define the content of ITT courses					
22	ITT courses should prepare students to teach					
23	ITT courses should prepare students to participate in educational research					
24	ITT courses should include an introduction to educational theory and its relationship to educational practice					
25	ITT courses should include the study of educational research documents					
26	There is a relationship between educational practice and educational research					
27	No training is required for teachers					

Please add comments (if you wish to qualify your response) below

SECTION B - VIEWS ON EDUCATIONAL ISSUES

Do you agree with following statements ?
Indicate your position on the bipolar scale with a cross, i.e. do you strongly disagree . . . . . strongly agree, or agree with (a) or (b) or both.

		INDICATE YOUR RESPONSE WITH A CROSS Strongly Disagree or (a) . . . . . Strongly Agree or (b)
1	The government has initiated a series of changes which will have a long term detrimental effect on those participating in the educational process as managers, providers or consumers.	. . . . .
2	a) Educational theorists 'sit in ivory towers' without any contact with 'real' people. b) Educational theorists determine policies relevant to education in practice.	. . . . .
3	a) Only teachers in schools can train teachers for schools. b) Teacher educators are required for the training of teachers.	. . . . .
4	a) Understanding educational theory is a prerequisite to good practice. b) Understanding educational theory is not relevant to good practice.	. . . . .
5	Teachers participate in educational research upon entering the classroom.	. . . . .
6	Teachers do not have time to participate in educational research.	. . . . .
7	Educational researchers tend to be non-practitioners.	. . . . .
8	a) Research methods in education are firmly rooted in scientific practice. b) Research methods in education are firmly rooted in educational practice.	. . . . .
9	a) Educational theory is aimed at organising and explaining <u>specific</u> aspects of the educational environment. b) Educational theory is a series of <u>generalisations</u> by which we attempt to explain some phenomena in a systematic manner.	. . . . .
10	a) Educational research is an extension of knowledge. b) Educational research is a fraud.	. . . . .

Please add comments (if you wish to qualify your response) below

SECTION C - THE NATURE OF TEACHING AS AN EDUCATIONAL PROCESS

Do you agree with following statements ?
Indicate your position on the bipolar scale with a cross indicating whether, or not, you strongly disagree or agree with each statement.

		INDICATE YOUR RESPONSE WITH A CROSS Strongly Disagree . . . . . Strongly Agree
1	Teaching is a skill	. . . . .
2	Teaching is an art	. . . . .
3	Teachers learn to teach	. . . . .
4	Teachers are 'born and not made'	. . . . .
5	Learning to teach requires the process of acquiring knowledge	. . . . .
6	Learning is the process of acquiring knowledge which is understood and of use	. . . . .
7	Knowledge of teaching is acquired through practice	. . . . .
8	ITT courses contribute to good practice in secondary schools	. . . . .
9	Educational research is a social science	. . . . .
10	The study of education is a natural science	. . . . .
11	Knowledge and an understanding of social sciences is relevant to educational practice	. . . . .
12	Initial teacher training courses should include the study of social sciences	. . . . .
13	Initial teacher training courses should be school based	. . . . .

Please add comments (if you wish to qualify your response) below

SECTION D

PLEASE TICK YOUR RESPONSE

1	Sex	Male	☐	Female	☐
2	Age	Under 25	☐	26-30	☐
		31-35	☐	36-40	☐
		41-45	☐	46-50	☐
		51-55	☐	56-60	☐
		61-65	☐	Over 65	☐
3	Qualifications	Cert.Ed.	☐	Dip.Ed.	☐
		P.G.C.E.	☐	B.Ed.	☐
		B.A.	☐	B.Sc.	☐
		B.Hum.	☐	B.Mus.	☐
		M.A.	☐	M.Ed.	☐
		M.Phil.	☐	M.Sc.	☐
		Ph.D.	☐	Other	☐
4	Current place of employment	School	☐	College of Education	☐
		University Department	☐	School of Education	☐
		Higher Education College	☐	Other	☐
5	Length of time in current institution	0-4 Yrs	☐	5-9 Yrs	☐
		10-14 Yrs	☐	15-19 Yrs	☐
		20-24 Yrs	☐	25 Yrs +	☐
6	Current position	Teacher	☐	Lecturer	☐
		Middle Manager	☐	Senior Manager	☐
		Other	☐		
7	Length of time in current position	0-4 Yrs	☐	5-9 Yrs	☐
		10-14 Yrs	☐	15-19 Yrs	☐
		20-24 Yrs	☐	25 Yrs +	☐
8	In what year did you complete a teacher training course (Leave blank if you have not completed a course)	Pre - 1961	☐	1961-65	☐
		1966-1970	☐	1971-75	☐
		1976-1980	☐	1981-85	☐
		1986-1990	☐	1991-	☐
9	Where did you train ?	Higher Education College	☐	University Department	☐
		School of Education	☐	Correspondence Course	☐
		Other	☐		
10	Please tick all the following descriptors that apply to you	Educator	☐	Teacher Educator	☐
		Educational Theorist	☐	Educational Researcher	☐
		Educational Manager	☐	Student of Education	☐
		Action Researcher	☐		

Please add comments (if you wish to qualify your response) on facing page

- **THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.**
- **Please fill in finishing time on the front cover.**
- **Please turn over.**

THE QUESTIONNAIRE

The design of this questionnaire is developed in four phases.

Phase 1	Draft 1
Phase 2	Pilot - Evaluation
Phase 3	**DRAFT 2**
Phase 4	Questionnaire

This is **Phase 3** To assist with the development of the questionnaire <u>please</u> complete the following:

1 <u>Presentation</u>

a) Is the type

- acceptable
- too big
- too small

b) Are the questions spaced out sufficiently ?

- yes
- bigger gaps
- smaller gaps

c) The quality of presentation is

- acceptable
- could be improved

2 <u>Introduction</u>

a) Was the introduction clear ?

- yes
- no

If no please mark <u>on the copy</u> any section which is unclear

3 <u>Questions</u>

a)Did you understand each statement ?

- yes
- no

If no, please list unclear statements

b) Did you understand each response (grid)?

- yes
- no

If no, please list unclear statements

c) Did the statements relate to the central issue(s) - The relationship between educational theory and research to educational practice ?

- yes
- no

If no, please list unclear statements

4 <u>Questionnaire</u>

a) Is the length of the questionnaire

- acceptable
- too long
- too short

b) Do you consider this questionnaire to be a relevant piece of educational research ?

- yes
- no

If no, why?

5 <u>Research</u>

a) Would you be willing to participate in a later phase of this research ?

b)Would you be interested in receiving the results of this phase of the questionnaire ?

c) Would you be interested in receiving a copy of the **Questionnaire ?**

THANK YOU FOR PARTICIPATING IN THIS RESEARCH. I VALUE YOUR TIME AND COMMENTS.

Questionnaire distribution

Phase I	Hengrove School colleagues Music - advisory teacher P.E. - advisory teacher Sec. Sector advisor - AVON Sec. Teacher Educators - University of Bristol Sec. Teacher Educators - CGCHE
Phase II	'Pilot Study' Devizes School (All Staff) Avon advisory teachers Teacher educators - CGCHE
Phase III	Repeat Phase I
Phase IV	King Edward's School (Independent) Wiltshire Comprehensives (2) Avon Comprehensives (2) University of Reading - School of Education Bath College of Higher Education University of Bristol

<u>Method</u>

Phases I/II	Investigator in person
Phases III/IV	Postal survey

APPENDIX 6

SECTION A - THEORY, RESEARCH AND PRACTICE

Part 1: Formal study of education theory and education research

Your responses should relate to when you studied education theory/ education research:
(a) Please indicate the course title - e.g. Cert.Ed. / B. Ed. / P.G.C.E in boxes provided.

(b) Please indicate the length of the period of study for each element of the course, e.g. sociology, curriculum.
1 = Not at all
2 = 12 weeks
3 = 24 weeks
4 = 36 weeks
5 = Do not know

(c) Please indicate whether, or not, you consider that the theoretical elements were relevant to educational practice.
1 = Not at all
2 = Very little of the course was relevant
3 = Most, but not all of the course was relevant
4 = The whole course was relevant
5 = Do not know

PLEASE TICK YOUR RESPONSE.

		Cert Ed	B Ed	PGCE	Master PhD	1	2	3	4	5
1a)	I have studied educational theory									
b)	*The educational theory course was relevant to educational practice*									
2a)	I have studied educational psychology									
b)	*The educational theory course was relevant to educational practice*									
3a)	I have studied the sociology of education									
b)	*The educational theory course was relevant to educational practice*									
4a)	I have studied the philosophy of education									
b)	*The educational theory course was relevant to educational practice*									
5a)	I have studied curriculum development									
b)	*The educational theory course was relevant to educational practice*									
6a)	I have studied educational research									
b)	*The educational theory course was relevant to educational practice*									
7a)	I have participated in educational research									
b)	*The educational research was relevant to educational practice*									
8a)	I have administered educational research									
b)	*The educational research was relevant to educational practice*									
9a)	I have participated in action research									
b)	*The action research was relevant to educational practice*									

Please add comments (if you wish to qualify your response) on facing page

APPENDIX 7

SECTION A - THEORY, RESEARCH AND PRACTICE

Part 2: Initial Teacher Training (ITT) - relationship between theory and practice

Your responses should relate to the following:

1 = Disagree completely
2 = Disagree, in part
3 = Agree, in part
4 = Agree completely
5 = Do not know

PLEASE TICK YOUR RESPONSE.

		1	2	3	4	5
10	There should be a relationship between educational theory and practice					
11	The study of educational theory is relevant to ITT courses					
12	Educational theory should be taught before teaching practice but after a period of observation on ITT courses					
13	ITT should be school based at secondary schools					
14	The training of teachers should be the same for all student teachers					
15	ITT courses should include the study of the social sciences					
16	ITT courses should include the study of curriculum development					
17	The training of teachers should be determined by Institutes of Higher Education					
18	ITT courses should include the study of action research					
19	All ITT courses should include a detailed evaluation of educational practice					
20	All ITT students should participate in educational research					
21	The Department for Education should define the content of ITT courses					
22	ITT courses should prepare students to teach					
23	ITT courses should prepare students to participate in educational research					
24	ITT courses should include an introduction to educational theory and its relationship to educational practice					
25	ITT courses should include the study of educational research documents					
26	There is a relationship between educational practice and educational research					
27	No training is required for teachers					

Please add comments (if you wish to qualify your response) on facing page

APPENDIX 8

SECTION B - VIEWS ON EDUCATIONAL ISSUES

Do you agree with following statements ?

Indicate your position on the bipolar scale with a cross,
i.e. do you strongly disagree ?
strongly agree ?
or agree with (a) or (b) or both ?

		INDICATE YOUR RESPONSE WITH A CROSS	
		Strongly Disagree or (a)	Strongly Agree or (b)
1	The government has initiated a series of changes which will have a long term detrimental effect on those participating in the educational process as managers, providers or consumers.	. . . . .	
2	a) Educational theorists 'sit in ivory towers' without any contact with 'real' people. b) Educational theorists determine policies relevant to education in practice.	. . . . .	
3	a) Only teachers in schools can train teachers for schools. b) Teacher educators are required for the training of teachers.	. . . . .	
4	a) Understanding educational theory is a prerequisite to good practice. b) Understanding educational theory is not relevant to good practice.	. . . . .	
5	Teachers participate in educational research upon entering the classroom.	. . . . .	
6	Teachers do not have time to participate in educational research.	. . . . .	
7	Educational researchers tend to be non-practitioners.	. . . . .	
8	a) Research methods in education are firmly rooted in scientific practice. b) Research methods in education are firmly rooted in educational practice.	. . . . .	
9	a) Educational theory is aimed at organising and explaining <u>specific</u> aspects of the educational environment. b) Educational theory is a series of <u>generalisations</u> by which we attempt to explain some phenomena in a systematic manner.	. . . . .	
10	a) Educational research is an extension of knowledge. b) Educational research is a fraud.	. . . . .	

Please add comments (if you wish to qualify your response) on facing page

APPENDIX 9

SECTION C - THE NATURE OF TEACHING AS AN EDUCATIONAL PROCESS

Do you agree with following statements ?
Indicate your position on the bipolar scale with a cross,
I.e. do you strongly disagree ?
or strongly agree ?

		INDICATE YOUR RESPONSE WITH A CROSS Strongly Disagree ... Strongly Agree
1	Teaching is a skill	
2	Teaching is an art	
3	Teachers learn to teach	
4	Teachers are 'born and not made'	
5	Learning to teach requires the process of acquiring knowledge	
6	Learning is the process of acquiring knowledge which is understood and of use	
7	Knowledge of teaching is acquired through practice	
8	ITT courses contribute to good practice in secondary schools	
9	Educational research is a social science	
10	The study of education is a natural science	
11	Knowledge and an understanding of social sciences is relevant to educational practice	
12	ITT courses should include the study of social sciences	
13	ITT courses should be school based	

Please add comments (if you wish to qualify your response) on facing page

APPENDIX 10

SECTION D

PLEASE TICK YOUR RESPONSE

1	Sex	Male ☐	Female ☐
2	Age	Under 25 ☐ 31-35 ☐ 41-45 ☐ 51-55 ☐ 61-65 ☐	26-30 ☐ 36-40 ☐ 46-50 ☐ 56-60 ☐ Over 65 ☐
3	Qualifications	Cert.Ed. ☐ P.G.C.E. ☐ B.A. ☐ B.Hum. ☐ M.A. ☐ M.Phil. ☐ Ph.D. ☐	Dip.Ed. ☐ B.Ed. ☐ B.Sc. ☐ B.Mus. ☐ M.Ed. ☐ M.Sc. ☐ Other ☐
4	Current place of employment	School ☐ University Department ☐ Higher Education College ☐	College of Education ☐ School of Education ☐ Other ☐
5	Length of time in current institution	0-4 Yrs ☐ 10-14 Yrs ☐ 20-24 Yrs ☐	5-9 Yrs ☐ 15-19 Yrs ☐ 25 Yrs + ☐
6	Current position	Teacher ☐ Middle Manager ☐ Other ☐	Lecturer ☐ Senior Manager ☐
7	Length of time in current position	0-4 Yrs ☐ 10-14 Yrs ☐ 20-24 Yrs ☐	5-9 Yrs ☐ 15-19 Yrs ☐ 25 Yrs + ☐
8	In what year did you complete a teacher training course (Leave blank if you have not completed a course)	Pre - 1961 ☐ 1966-1970 ☐ 1976-1980 ☐ 1986-1990 ☐	1961-65 ☐ 1971-75 ☐ 1981-85 ☐ 1991- ☐
9	Where did you train ?	Higher Education College ☐ *School of Education* ☐ Other ☐	University Department ☐ Correspondence *Course* ☐
10	Please tick all the following descriptors that apply to you	Educator ☐ Educational Theorist ☐ Educational Manager ☐ Action Researcher ☐	Teacher Educator ☐ Educational Researcher ☐ Student of Education ☐

Please add comments (if you wish to qualify your response) on facing page

- **THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.**
- **Please fill in finishing time on the front cover.**

APPENDIX 11

THE QUESTIONNAIRE

The design of this questionnaire is developed in four phases.

Phase 1	Draft 1
Phase 2	Pilot - Evaluation
Phase 3	Draft 2
Phase 4	**Questionnaire**

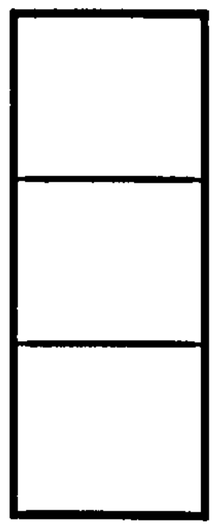
This is **Phase 4.** To assist with the development of the questionnaire <u>please</u> complete the following:

<u>Research</u>

1 a) Would you be willing to participate in a later phase of this research ?

b)Would you be interested in receiving the results of this phase of the questionnaire ?

c) Would you be interested in receiving a copy of the **Questionnaire ?**



THANK YOU FOR PARTICIPATING IN THIS RESEARCH. I VALUE YOUR TIME AND COMMENTS.

Questionnaire distribution

Phase I	Hengrove School colleagues Music - advisory teacher P.E. - advisory teacher Sec. Sector advisor - AVON Sec. Teacher Educators - University of Bristol Sec. Teacher Educators - CGCHE
Phase II	'Pilot Study' Devizes School (All Staff) Avon advisory teachers Teacher educators - CGCHE
Phase III	Repeat Phase I
Phase IV	King Edward's School (Independent) Wiltshire Comprehensives (2) Avon Comprehensives (2) University of Reading - School of Education Bath College of Higher Education University of Bristol

<u>Method</u>

Phases I/II	Investigator in person
Phases III/IV	Postal survey

APPENDIX 12

Questionnaire

The Relationship between Educational Research, Theory and Practice in Secondary Schools - A Teacher's Perspective.

- Thank you for agreeing to participate in this research.

- Your views are relevant and will be treated with the utmost respect.

- If you wish to add written comment to amplify your views, please do so in the space provided.

- Information generated from this research will:

  - be of importance, not least because it is based on the experience, knowledge and beliefs of practising teachers, L.E.A. advisors and teacher educators.
  - inform those engaged in educational theory, educational research and educational practice.
  - be written from a teacher's perspective.

- A copy of this research will be available, on completion, at the University of Bristol - School of Education Library.

Please note **Time started:**
Time completed:

Completed copies will be:

Date issued:
Date collected:

Ref: SB April 94/4

APPENDIX 13

Hazelbury Cottage
Hazelbury Hill
Box
Wiltshire
SN14 9LB

16th May 1994

Dear Respondent,

The enclosed questionnaire will, in part, form the basis of research into Initial Teacher Training. As a teacher (secondary) my aim is to present an overview of the relationship between theory, practice and research from a teacher's perspective.

I value your participation in this research, thank you for your assistance with my work.

Best wishes,

Yours sincerely,

Sonia Blandford
University of Bristol - Ed.D